BULLETIN OF THE
HISTORY OF MEDICINE

ORGAN OF THE AMERICAN ASSOCIATION OF THE HISTORY OF MEDICINE
AND THE JOHNS HOPKINS INSTITUTE OF THE HISTORY OF MEDICINE

Editor—HENRY E. SIGERIST

VOLUME X DECEMBER, 1941 NUMBER 5

THE INTRODUCTION OF THE PRACTICE OF VACCINATION INTO NAPOLEONIC FRANCE

ROBERT G. DUNBAR
Colorado State College of A. & M.
Fort Collins, Colorado

The discovery of vaccination by Edward Jenner of Gloucestershire is well-known; it has been the subject of numerous books and articles.[1] Not so well-known is the manner in which the new practice spread to the other countries of Europe. This study is concerned with the story of its introduction into France. For the purpose of clarity it has been divided into three parts: (1) the acceptance of the practice of vaccination by the London doctors; (2) its introduction into France; and (3) its dissemination throughout France by the French medical profession.

[1] John Baron, *The life of Edward Jenner* (London, 1827; 2d. ed. 2 vols., 1838); Louis H. Roddis, *Edward Jenner and the discovery of smallpox vaccination* (Menasha, 1930); Frederic G. Dawtrey Drewitt, *The life of Edward Jenner, naturalist, and discoverer of vaccination* (London, 1931, 2d ed. 1933); Grace T. Hallock & C. E. Turner, *Edward Jenner* (New York, 1928); Ernesto Bertarelli, *Edoardo Jenner e la scoperta della vaccinazione* (Milan, 1932); L. Camus, "Jenner et la vaccine," *Bulletin de l'académie de médecine,* 3d series, LXXXIX (1923),

Inoculation with smallpox virus to secure immunity from the disease had been practised in Europe since 1721, when it was introduced into England by Lady Mary Wortley Montagu. From England it had spread to the continent of Europe, just as vaccination was to do three-quarters of a century later. However, the practice of inoculation, though a dependable preventive, had four serious disadvantages. First, the mortality rate was relatively high; death rather than prevention was always a possible outcome. Second, smallpox caused by inoculation was contagious and the patient therefore had to be segregated in a hospital. Third, those inoculated were ill for a number of days. Fourth, it was rather expensive. A more convenient preventive was therefore welcome when in June, 1798, Edward Jenner announced the new method of inoculation with cowpox virus, or vaccination as it soon became known.

Jenner lived in Gloucestershire, an English dairy district. Here it had long been a tradition that a dairy-maid who had had cowpox would never have smallpox. Jenner's contribution to science was to bring this fact to the attention of the learned world. After confirming the tradition by means of twenty-three successful tests, he published an account of them in *An inquiry into the causes and effects of the variolae vaccinae, a disease discovered in some of the western counties of England, particularly Gloucestershire and known by the name of the cowpox* and announced his conclusion, " that the cowpox protects the human constitution from the infection of smallpox." [2] This was in June, 1798.

His publication immediately attracted the attention of several prominent London doctors, among them Drs. George Pearson of St. George's Hospital and William Woodville of the Smallpox and Inoculation Hospital. After reading the *Inquiry,* Pearson independently investigated the preventive qualities of natural cowpox, came to the same conclusion as Jenner, and published before the year was

89-110; Francesco Abba, " Edoardo Jenner nel primo centenario della sua morte," *Rivista di storia delle scienze mediche e naturali,* anno XV, vol. VI (1924), 65-106; M. Greenwood, " Jenner," *Biologie médicale,* XXIX (1939), 374-411, and others.

[2] Edward Jenner, *An inquiry into the causes and effects of the variolae vaccinae, a disease discovered in some of the western counties of England, particularly Gloucestershire and known by the name of the cowpox* (London, 1798, facs. ed., Milan, 1923), 45.

out his *Inquiry concerning the history of cowpox*.[3] As director of the inoculation hospital, Woodville was interested in the new discovery. Nevertheless, before January, 1799, neither one had had an opportunity to vaccinate.

In January, 1799, cowpox appeared in the dairy herds about London, and Woodville secured some cowpox virus from one of the dairies. That winter and spring Woodville vaccinated 510 persons, and in May, 1799, he published his results; they too tallied with those of Jenner.[4] By May, 1800, Woodville had vaccinated nearly 4,000.[5]

In the meantime, Pearson had been active. He helped Woodville with the latter's first experiments; later he vaccinated independently. In order to make the new practice accessible to the poor, he opened a subscription for the support of a free vaccination institute. The subscription was successful and the institute, provided with a physician and a surgeon, opened for business on December 2, 1799.[6]

At the time of the publication of the *Inquiry*, Great Britain and France were at war—a war which had been going on for more than five years and which would continue, except for a truce following the Peace of Amiens, for seventeen years more. Therefore, intercourse between the two countries was irregular and infrequent. It was difficult for the French doctors to secure information and vaccine from across the Channel. This situation was one of the factors which postponed the introduction of the practice of vaccination into France.[7] Another was the difficulty of transporting live cowpox virus long distances.

[3] George Pearson, *An inquiry concerning the history of cowpox, principally with a view to supersede and extinguish the smallpox* (London, 1798).

[4] William Woodville, *Reports of a series of inoculations for the variolae vaccinae or cow-pox* (London, 1799); *Bibliothèque britannique; ou recueil extrait des ouvrages anglais périodiques, & autres. . . . sciences et arts* (60 vols.; Geneva, 1796-1815), XII, 146-162, 271-305.

[5] Letter of Antoine Aubert to Louis Odier, May 9, 1800, reproduced in *Bibliothèque britannique*, XIV, 282-3.

[6] *Bibliothèque britannique*, XIV, 264-76; *Journal der practischen Arzneikunde und Wundarzneikunst*, edited by C. W. Hufeland (97 vols.; Jena & Berlin, 1795-1844), X, pt. 2, 182; *Dictionary of national biography*, edited by Leslie Stephen and Sidney Lee (22 vols.; London, 1921-22, reprint), XV, 610-11.

[7] A. Aubert, *Rapport sur la vaccine ou traité sur cette maladie* (Paris, an IX),

Knowledge of Jenner's discovery first[8] reached France through the medium of the *Bibliothèque britannique,* a monthly journal which had been founded in 1796 to make current English literature available to the French-reading public of continental Europe.[9] Its place of publication was Geneva and its editors were prominent Genevans. In the fall of 1798, one of them, Professor Marc-Auguste Pictet of the University of Geneva, made a journey to England in order to secure material for the periodical and returned with a copy of the recently published *Inquiry.*[10]

The first notice appeared in the October 1798 issue.

> Dr. Edward Jenner of Berkeley in Gloucestershire has demonstrated by a multitude of carefully performed observations and tests that all those who have had this illness [cowpox] are forever protected from ordinary smallpox and made incapable of contracting it, either by contagion or inoculation.[11]

This was followed in the November and December issues by a nearly complete translation of the *Inquiry* by Dr. Louis Odier, a prominent Genevan physician who had been educated at the University of Edinburgh.[12] This translation in the *Bibliothèque britannique* was continental Europe's first extensive introduction to the contents of Jenner's treatise.

Other notices appeared the following year—in 1799. A short

v; François Colon, *Histoire de l'introduction et des progrès de la vaccine en France* (Paris, 1801), 13.

[8] *Archives nationales.* F[8]112-Léman, Rapport sur la vaccination et ses progrès dans le département de Léman par Louis Odier; *Bibliothèque britannique,* XV, 72; d'Espine, "Le rôle des médecins génevois dans la propagation de la vaccination," *Bulletin de l'académie de médecine,* 3d ser., LXXXIX, 141; *Le moniteur universel,* 10 fructidor an XI; *Mémoires de l'académie des sciences de l'institut de France* (14 vols., 1st series; Paris, 1796-1815), V, 160; Colon, *Histoire,* 12-14.

[9] *Bibliothèque britannique,* I, 1-10.

[10] *Archives nationales,* F[8]112-Léman, Rapport sur la vaccination et ses progrès dans le département de Léman par Louis Odier; J. P. Vaucher, "Notice sur Mr. M. A. Pictet," *Bibliothèque universelle des sciences, belles-lettres, et arts. . . . sciences et arts* (60 vols.; Geneva, 1816-1835), XXIX, 69; *Bibliothèque britannique,* XV, 72, XVII, 401, 409.

[11] *Bibliothèque britannique,* IX, 195-6.

[12] *Ibid.,* IX, 258-84; 367-99; d'Espine, *loc. cit.,* LXXXIX, 141; Edouard Chapuisat, *La municipalité de Genève pendant la domination française* (2 vols.; Paris, 1910), II, 196.

review of the *Inquiry* appeared in the August-September issue of the *Recueil périodique de littérature médicale étrangère,* a magazine published in Paris by the members of the Society of Medicine of Paris.[13] During the same year, another notice appeared in a footnote to Louis Valentin's and François Dezoteux's *Traité historique et pratique de l'inoculation.*[14] The first complete translation of the *Inquiry* into French was made in the winter of 1799-1800 by a French *émigré,* Count Joseph de la Roque, apparently while he was still in London, and published at Lyons; within seven months it had passed through three editions.[15] About the same time, Woodville's study was translated by a young Genevan doctor, Antoine Aubert, and published in Paris.[16] These notices, for the most part favorable, aroused a lively interest in the discovery.[17]

The doctors of the Society of Medicine at Paris were the first to act; they appointed the celebrated psychiatrist, Dr. Philippe Pinel, director of the Salpêtrière insane asylum, to investigate Jenner's assertions and to make a report.[18]

The first vaccinations performed in Paris were made by Drs. Pinel and Aubert on August 16, 1799. Dr. Aubert furnished the cowpox virus which he had received from Woodville along with a copy of the book which he used as the basis for his translation. Dr. Pinel furnished the patients. Together on August 16-17, they vaccinated three foundlings. Unfortunately the vaccine, which had been

[13] *Recueil périodique de littérature médicale étrangère* (2 vols.; Paris, an VII), I, 453-4.

[14] Louis Valentin and François Dezoteux, *Traité historique et pratique de l'inoculation* (Paris, an VIII), 301-3.

[15] Baron, *Life of Edward Jenner* (London, 1827), 392-3; *Recueil périodique de la société de médecine de Paris* (111 vols.; Paris, 1796-1830), VIII, 314; L. Plantier, "L'introduction de la vaccine à Annonay: Joseph de la Roque et Mathieu Duret," *Paris médical,* XXXVI (1920), 22. The translation was dedicated to Dr. Mathieu Duret, March 3, 1800.

[16] William Woodville, *Rapport sur le cowpox, ou la petite vérole des vaches, et sur l'inoculation de cette maladie considérée comme pouvant être substituée à la petite vérole.* Translated from the English by A. Aubert (Paris, an VIII); Marcel Godet, Henri Türler, Victor Attinger, editors, *Dictionnaire historique et biographique de la Suisse* (7 vols.; Neuchâtel, 1921-1933), I, 454.

[17] *Rapport du comité central de la vaccine, établi à Paris par la société des souscripteurs pour l'examen de cette découverté* (Paris, 1803), 4.

[18] Woodville, *Rapport sur le cowpox,* Discours préliminaire by Aubert, lix.

taken from vaccinated patients on June 8, 1799, and had been sent by means of a piece of linen soaked with virus, had lost its efficacy, and the first attempt at vaccination in Paris failed.[19]

Early in 1800 the faculty of the School of Medicine of the University of Paris became interested enough to appoint, on January 19th, a committee to test Jenner's discovery; the National Institute appointed a similar committee—the two were to cooperate.[20] About the same time, Aubert, disappointed with the results of his first attempt at vaccination, decided to go to England in order to study the new inoculation at first hand. The first activity of these two committees seems to have been to provide Aubert with a series of questions concerning the discovery and to ask him to obtain the answers from the English doctors.[21]

Aubert went; he was welcomed by both Jenner and Woodville, but particularly by Woodville. The latter made him his pupil, placed him in his hospital, and allowed him not only to observe, but to perform vaccinations himself. In May, 1800, Aubert wrote to Louis Odier,

> I have had the good fortune to find a friend in the person of Mr. Woodville. . . . He has instructed me. . . . He has placed me in his hospital, permitting me to vaccinate and to observe with my own eyes.

By this time the young Genevan was convinced of the authenticity of Jenner's discovery. In the same letter he wrote,

> I am at present convinced of the truth of the assertions of Drs. Jenner and Woodville. Cowpox is a certain preservative against smallpox.[22]

Meanwhile he had provided a fellow Genevan by the name of Jean-Pierre Colladon, who was returning from England to the Continent, with some cowpox virus to be used in Paris. The material was used by Pinel, again at the Salpêtrière, on April 14, 1800. The

[19] *Ibid.*, xxxii, lviii-lxiii; Henri-Marie Husson, *Recherches historiques et médicales* (Paris, 1801, 1st ed.), 82.

[20] *Rapport du comité central,* 4-5; Aubert, *Rapport,* iv; *Mémoires de l'académie des sciences de l'institut de France,* 1st series, V, 158.

[21] Aubert, *Rapport,* v; *Rapport du comité central,* 5; Colon, *Histoire,* 13-14.

[22] *Bibliothèque britannique,* XIV, 282-3, Aubert to Odier, May 9, 1800; Aubert, *Rapport.* v-vi.

virus, however, was ineffective, and the second attempt at vaccination in Paris failed.[23]

The successful introduction of vaccination into France was in a large measure the work of another group. In November, 1799, Napoleon Bonaparte became dictator of France; he proclaimed his policy of reconciliation and permitted the return of some of the *émigrés* exiled by the Revolution. Among those who returned was that true citizen of the Enlightenment, La Rochefoucauld-Liancourt. He was interested in vaccination. Although he was in France at the time of the creation by a subscription of George Pearson's vaccination institute in London,[24] he soon learned of the event. Early in the spring of 1800 he proposed the organization of a similar institution in Paris, also by means of a subscription. The idea having been welcomed by a number of his friends and by " some of the most distinguished Parisian doctors," the subscription was opened and immediately fulfilled.[25] Among the subscribers were Lebrun, one of the three consuls of the new government; Lucien Bonaparte, Napoleon's brother and Minister of the Interior; Talleyrand, Minister of Foreign Affairs; and Frochot, Prefect of the Department of the Seine.[26] The Consulate was interested.

The subscribers held their first meeting on May 11, 1800, at the School of Medicine of the University of Paris. They decided to accept as a vaccination hospital a house on the Rue de Vaugirard offered to them by a health officer named Dr. François Colon. Then they organized what later became known as the Central Committee of Vaccination. It was composed of two sub-committees: a medical committee of nine doctors to follow daily the progress of the vaccina-

[23] *Rapport du comité central,* 5; L. Camus, " Jenner et la vaccine," *Bulletin de l'académie de médecine,* LXXXIX, 105; Baron, *Jenner,* 391; *Bibliothèque britannique,* XIV, 282-3, Aubert to Odier, May 9, 1800; *Dictionnaire historique et biographique de la Suisse,* II, 543.

[24] Ferdinand-Dreyfus, *Un philanthrope d'autrefois: La Rochefoucauld-Liancourt, 1747-1827* (Paris, 1903), 242. The Moniteur announced on November 28, 1799, his return to France; Pearson's vaccination institute was founded, December 2, 1799.

[25] *Rapport du comité central,* 6; Colon, *Histoire,* 15; *Mémoires . . . de l'institut de France,* 1st ser., V, 161; Louis Odier, *Memoria sopra l'inoculazione della vaccina in Ginevra* (Padova, 1801), 22.

[26] *Rapport du comité central,* xi-xiv.

tions and to keep a detailed journal of the results, and an administrative committee of five to take care of business matters. The task of the medical committee was to repeat and test the observations of the English doctors in order to determine the validity of Jenner's discovery. Inasmuch as Pinel was a member of this committee, it was to have the benefit of his experience. Dr. Michel-Augustin Thouret, director of the School of Medicine, assumed charge of the hospital and of the disbursement of funds. The subscribers decided to supply the newspapers and journals with information concerning their progress.[27]

Now that the machinery was created, it was the vaccine that was needed. The committee members obtained it from their prototype organization in London under the direction of George Pearson —not, however, without difficulty. Great Britain and France were still at war; Napoleon was crossing the Alps, preparatory to the battle of Marengo. In this situation they received the aid of Talleyrand in his capacity as foreign minister and also the cooperation of Louis-Guillaume Otto, the representative of France in Great Britain.[28] The vaccine was sent, May 27, 1800. It was received, and on June 2nd thirty children were vaccinated "according to Dr. Pearson's instructions." Only nine of them reacted satisfactorily. Later in the month eighteen of those who failed to react satisfactorily were revaccinated with virus taken from the pustules of the nine. These eighteen again failed to react according to the descriptions of the English doctors, and the vaccine was declared ineffective.[29] It had degenerated into what became known as false or bastard vaccine.[30] And so the third attempt to introduce the practice of vaccination into France failed.

[27] *Journal de Paris,* # 236, 26 floreal an VIII, # 208, 28 germinal an IX; *Rapport du comité central,* 7; Colon *Histoire,* 15-16; Ferdinand-Dreyfus, *op. cit.,* 267; *Journal de médecine, chirurgie, pharmacie, etc.* (40 vols.; Paris, 1801-1817), II, 162.

[28] *Rapport du comité central,* 8-9.

[29] *Journal de Paris,* # 263, 23 prairial an VIII, # 277, 7 messidor an VIII, # 31, 1er brumaire an IX; *Recueil périodique de la société de médecine de Paris,* VIII, 239-240, 314-5, IX, 206; *Rapport du comité central,* 9-12; Colon, *Histoire,* 18-19, 29-30, 39-41.

[30] *Rapport du comité central,* 12; Henri-Marie Husson, *Recherches historiques et médicales sur la vaccine* (Paris, 1803, 3d ed.), 82-115.

At this point Aubert and Woodville re-enter the narrative. Woodville, the most experienced vaccinator in England, suddenly decided that he would like to come to Paris and help the committee there. That Aubert was instrumental in the formation of this decision, there can be little question.[31] The Central Committee of Vaccination in Paris was notified; the necessary passports were secured from Talleyrand, and Woodville, an enemy doctor, crossed the Channel into France.[32] Detained in Boulogne by the authorities, he made use of the time to vaccinate several children there. He arrived in Paris on July 25, 1800, and the committee resumed its vaccinations, but the vaccine which Woodville had brought with him produced no effect, either on account of its age or of the excessive heat which prevailed at that time. This was the fourth failure.

Fortunately, the vaccinations which he had performed in Boulogne were successful and the committee was able to secure fresh virus less than twenty-four hours old. With this new material, Woodville vaccinated the eleven-month old son of Colon on August 8, 1800.[33] The vaccination was successful. After four unsuccessful attempts, the practice of vaccination was permanently introduced into France —a year and four months after it was introduced into Austria, several months after it was introduced into Prussia and Geneva.[34] So much did war and the difficulty of preserving viable vaccine hinder the passage of the practice of vaccination across the English Channel.

Now that the Central Committee of Vaccination was organized and a supply of cowpox virus secured, there followed a three-year period of testing to determine the accuracy of Jenner's conclusion.

[31] d'Espine, "Le rôle des médecins génevois," *Bulletin de l'académie de médecine*, LXXXIX, 143; Max Billard & André Fasquelle, *Napoléon et la vaccine* (Paris, 1908), 9.

[32] *Rapport du comité central*, 13.

[33] *Ibid.*, 13-14; *Journal de Paris*, # 312, 12 thermidor an VIII, # 31, 1er brumaire an IX; *Journal de médecine*, I, 254-5; *Recueil périodique de la société de médecine de Paris*, IX, 206-7, XV, 292; Colon, *Histoire*, 25-8, 30, 40-1; François Colon, *Essai sur l'inoculation de la vaccine* (Paris, an IX), 22-3, 27, 31; Aubert, *Rapport*, vii.

[34] The practice of vaccination was introduced into Austria in April, 1799, into Prussia in February, 1800, and into Geneva in May, 1800. P. Kübler, *Geschichte der Pocken und der Impfung* (Berlin, 1901), 174-7; *Hufeland's Journal*, XIX, pt. 1, 55-6; *Bibliothèque britannique*, XI, 337-346; Odier, *Memoria sopra l'inoculazione*, 10.

This testing consisted mainly in vaccination, followed by inoculation with smallpox virus to determine the effectiveness of the first operation. By October 20, 1800, the committee had vaccinated more than one hundred and fifty people. It reported,

> All of those vaccinated have had the disease very mildly; no accident has occurred.

It reported also that nineteen of those vaccinated had been reinoculated with smallpox pus and that none of them had taken the disease.[35]

On January 25, 1801, the Central Committee petitioned Nicolas-Thérèse-Benoist Frochot, Prefect of the Department of the Seine, for a new hospital. The house which François Colon had so willingly placed at its disposal was outside the city-limits near the *École militaire,* removed from the center of things. As the winter wore on and more people became interested in the new discovery, more convenient and commodious quarters were necessary.[36]

Frochot complied and set aside for the use of the committee a building near the Hôtel de Ville, in the very heart of the city. This he did by a decree of February 7, 1801;[37] sometime early in April, 1801, the committee moved in.[38] Here, during the succeeding years, it vaccinated gratuitously, maintained a fresh supply of vaccine, and held its meetings once or twice a week. The hospital was tended by a sister of charity and was visited daily by two members of the committee. Here four members of the Institute brought their children to be vaccinated. From here vaccine was sent all over France.[39]

The Central Committee of Vaccination continued its investigations; test after test bore out the validity of the Jennerian principle that one who had contracted cowpox was immune from smallpox. On April 11, 1801, it reported,

[35] *Journal de Paris,* # 31, 1er brumaire an IX; *Journal de médecine,* I, 254-259.

[36] *Rapport du comité central,* 16-17; *Recueil périodique de la société de médecine de Paris,* VIII, 240.

[37] *Rapport du comité central,* 17-18, 442; Colon, *Histoire,* 80-2; Ferdinand-Dreyfus, *op. cit.,* 267; Louis Passy, *Frochot, préfet de la Seine* (Paris, 1874, 2d ed.), 471.

[38] *Le moniteur universel,* # 207, 27 germinal an IX; *Journal de Paris,* # 208, 28 germinal an IX; *Journal de médecine,* II, 162-5.

[39] *Rapport du comité central,* 18-19; *Mémoires . . . de l'institut de France,* 1st ser., V. 162-5.

The committee is always busy repeating the experiments of the English, trying out new ones, increasing the number of tests and seeking the truth. . . . Up to the present its work has been crowned with success in the various hospitals. Its experiences have been so many and its correspondence with foreign and domestic doctors so extensive, that it regards the preventive effect of cowpox as a truth, if not demonstrated, at least on the point of being so.[40]

Yet it was not until 1803, two years later, that the committee made its final report—that Edward Jenner was right.[41] Then, the care and thoroughness with which the committee had done its work removed all doubt.[42]

In the meantime two other committees appointed to determine the validity of Jenner's conclusions had reported favorably. A group of Parisian doctors not connected with the University of Paris and organized into the Society of Medicine of Paris appointed a committee on February 1, 1801, "to repeat the experiments with cowpox."[43] This committee with its offices in the Louvre vaccinated the poor free of charge; it also conducted an extensive correspondence with doctors all over Europe. It made two reports, one on June 6, 1801, the other on December 16, 1802; both were favorable, even enthusiastic.[44] On March 14, 1803, the committee which the Institute had appointed early in 1800 reported in the affirmative. Its members had come to the conclusion,

that the mass of facts, those which were developed under the eyes of the members of the committee as well as those gathered from every part of France, constitutes a sum total of observations, from which is derived the most decisive experimental evidence that one could ever desire.[45]

The practice of vaccination was accepted in the French capital.

[40] *Journal de Paris*, # 208, 28 germinal an IX.

[41] *Rapport du comité central*, 416.

[42] *Journal de médecine*, VI, 479-485, letters of Jean-Antoine Chaptal, Minister of the Interior, to the Central Committee of Vaccination (May 4, 1803) and to the prefects (May 26, 1803); *Hufeland's Journal*, XIX, pt. 1, 59.

[43] *Recueil périodique de la société de médecine de Paris*, X, 88; Colon, *Histoire*, 84; *Journal de Paris*, # 161, 11 ventose an IX.

[44] "Premier rapport de la commission de vaccine, séante au Louvre, à la société de médecine," *Recueil périodique de la société de médecine de Paris*, XI, 113-150; "Second rapport de la commission de vaccine à la société de médecine de Paris," *Ibid.*, XV, 274-349.

[45] "Rapport sur l'examen de la méthode de préserver de la petite-vérole par

As the various committees and doctors in Paris vaccinated and tested, the new practice was introduced into the provinces of France. It was introduced from two centers—Paris and Geneva—particularly from Paris.[46] This dissemination of the practice of vaccination into the provinces occurred for the most part within a year after its successful introduction into Paris, from September, 1800, to September, 1801—the year IX of the revolutionary era.

In Paris both the Central Committee of Vaccination and the committee of the Society of Medicine were active in distributing vaccine and literature and in conducting an extensive correspondence. So likewise was François Colon. The two leading Parisian medical journals, the *Journal de médecine, chirurgie, pharmacie, etc.* and the *Recueil périodique de la société de médecine de Paris,* acquainted the provincial doctors with Jenner's discovery and, by publishing the reports of the committees, kept these doctors informed of the testing in Paris. Information concerning vaccination and its advantages was also available through several books published in the capital. Aubert's *Rapport sur la vaccine* (Paris, an IX) and Colon's *Essai sur l'inoculation de la vaccine* (Paris, an IX) were among them. The latter was distributed to the provincial doctors through the prefects by the ministry of the interior.[47] Many of these doctors were graduates of the Paris medical school and so had close ties with Thouret and some of the members of the Central Committee of Vaccination; a few of them came to Paris to witness the new inoculation at first hand.[48]

Geneva, which had been a part of France since its annexation in April, 1798, was the publication-place of the *Bibliothèque britannique,* the magazine through which western Europe first learned of Jenner's discovery. Jenner had no more enthusiastic supporter on the continent of Europe than its medical editor, Dr. Louis Odier. Under his direction, the *Bibliothèque britannique* became, in the years

l'inoculation de la vaccine, par le citoyen Hallé au nom d'une commission composée des citoyens Portal, Fourcroy, Huzard et Hallé," *Mémoires . . . de l'institut de France,* 1st ser., V, 158-194.

[46] "Rapport sur la vaccine fait au nom de la commission nommée par la société de médecine de Lyon," *Recueil des actes de la société de santé de Lyon,* II, 447.

[47] Colon, *Histoire,* 28-9.

[48] *Ibid.,* 64, 138, 142, 158.

1798 to 1802, a veritable propaganda sheet in favor of vaccination, which was introduced into Geneva in May, 1800, two months before Woodville successfully introduced it at Paris. From Geneva, cowpox virus was sent to doctors in southern and eastern France.[49]

Vaccination was introduced into Rheims in the midst of a smallpox epidemic by a Parisian doctor by the name of Henri-Marie Husson. This was in October, 1800. Shortly afterwards the doctors there, one of them Husson's brother, organized a medical committee similar to the Central Committee of Vaccination in Paris in order to "preserve and propagate at Rheims the cowpox virus." During that autumn of 1800 its members vaccinated 164 individuals and introduced the practice into the surrounding towns.[50]

About the same time the new immunization was introduced into Lorraine, Languedoc, Guienne, Brittany, and Normandy—into the East, the South, the West, and the North of France.

The first vaccinations in Lorraine were performed at Nancy by Louis Valentin on October 27, 1800. Valentin had written in 1786 his bachelor's thesis on inoculation with smallpox virus. At the beginning of the French Revolution he had emigrated to Haiti. There he had been caught in the slave uprising of Toussaint L'Ouverture and had been fortunate enough to escape to the United States. He had spent the next years of his life in Virginia as director of the French hospitals for French sailors. Returning to France in 1799, he had published with François Dezoteux the treatise on inoculation mentioned earlier in this article (p. 639). However, Valentin immediately became one of the most enthusiastic advocates of vaccination. From Nancy, he sent cowpox virus into the five surrounding departments—the Meuse, the Vosges, the Moselle, the Haut-Rhin, and the Bas-Rhin. For instance, in the late winter of 1801, he sent some to his friend, Dr. Clercx, at Metz, who vaccinated his son on

[49] *Archives nationales*, F[8]112-Léman, Louis Odier, Observations sur les erreurs continués dans le 1[er] bulletin du comité central de vaccine établi à Paris; *Bibliothèque britannique*, XIV, 199; Louis Odier, *Memoria sopra l'inoculazione della vaccine*, 9-10.

[50] *Journal de médecine*, I, 259-261, 265-267, II, 72-3; *Journal de Paris*, # 43, 13 brumaire an IX. Years later, in 1811, Husson was entrusted with the vaccination of Napoleon's son, the King of Rome. *Le moniteur universel*, # 156, 16 mai 1811; Bertarelli, *Edoardo Jenner e la scoperta della vaccinazione*, 96.

March 3, 1801. A few weeks later the doctors of Metz organized a committee to study the new method.[51]

What Valentin was to the eastern departments, Tarbes at Toulouse was to Languedoc and Provence. Tarbes performed his first vaccination, November 28, 1800. The following spring he offered to vaccinate the poor and the soldiers gratuitously. The authorities of the local *lycée* took a decided interest in the new method of immunization. From Toulouse it was introduced into the adjoining departments.[52] At Bordeaux in Guienne the local society of medicine appointed a committee, which obtained vaccine in the fall of 1800 and began to vaccinate.[53]

Vaccination was introduced into Rennes, Brittany, on October 28, 1800,[54] and it was introduced into Rouen, the old capital of the dukes of Normandy, by Dr. Antoine-Louis Blanche at about the same time. Blanche was one of those who went to Paris to gain an eye-witness knowledge of the new method.[55]

And so all over France doctors became interested; they secured cowpox pus and began to vaccinate, often in the face of opposition from members of their own profession. One Michel in the department of the Hautes-Alpes obtained vaccine and on March 29, 1801, initiated the practice in that area by vaccinating his year-old son.[56] A doctor in Normandy wrote to Thouret of the Central Committee of Vaccination and obtained vaccine, which he used in the presence of an assembly of doctors, March 16, 1801.[57] In many cities the

[51] *Archives nationales,* F[a]117-Moselle, Rapport sur l'introduction de la vaccine à Metz et sa propagation dans le département de la Moselle; Louis Valentin, *Résultats de l'inoculation de la vaccine dans les départements de la Meurthe, de la Meuse, des Vosges et du Haut-Rhin* (Nancy, 1802), 40-5; G. Michel, "Jenner et le docteur Valentin de Nancy," *Revue médicale de l'est,* LI (1923), 366-9; *Diction[n]aire des sciences médicales: biographie médicale* (7 vols.; Paris, 1820-1825), VII, 387-8; *Rapport du comité central,* 150, 169-170; Colon, *Histoire,* 109.

[52] Colon, *Histoire,* 113-16; *Rapport du comité central,* 136-7; *Recueil périodique de la société de médecine,* XV, 329, 339; R. Tarbes, *Mémoire sur la vaccination pratiquée avec l'aiguille à coudre* (Paris, 1809), 22.

[53] *Archives nationales,* F[a]110-Gironde, Rapport sur les vaccinations faites dans le département de la Gironde; *Recueil périodique de la société de médecine,* XV, 328.

[54] Colon, *Histoire,* 137.

[55] *Ibid.,* 142; *Recueil périodique de la société de médecine,* XV, 330.

[56] *Archives nationales,* F[a]101-Hautes-Alpes.

[57] *Ibid.,* F[a]103-Calvados.

physicians followed the example of those of Paris, Rheims, Bordeaux, and Metz and organized committees to investigate the new inoculation. This was done in Lyons, where the local society of medicine appointed a committee, which began its study on March 26, 1801. It reported favorably later in the year.[58] Similar committees were organized in Nantes, Amiens, Chartres, Abbeville, Montauban, Caen, Tours, Rouen, Toulon, and elsewhere.[59]

Within a few years vaccination was introduced into most of the departments. A year after Woodville's journey to Paris, Colon reported that he had sent vaccine into at least 70 departments. From 45 of these, he had had definite information that vaccination was in practice. In April 1803, the Central Committee of Vaccination reported that during the previous three years it had corresponded with 676 doctors in nearly 500 different towns.[60]

Such is the story of the introduction of the practice of vaccination into France and its dissemination throughout France by the French medical profession. From it may be deduced at least five generalizations:

1. The introduction into France of one of the most important scientific discoveries of modern times was delayed by war and by the difficulties of preserving cowpox virus;

2. War, however, was much less totalitarian at the beginning of the nineteenth century than today. Then an enemy doctor with the aid of an enemy government could enter an enemy land to introduce a new medical practice. The wonder of the situation is not that the introduction of vaccination was delayed by war, but that it was introduced at all in the midst of war. War then could affect relatively little the republic of science;

3. The doctors of Geneva played a prominent role in the introduction of the practice into France;

[58] *Ibid.*, F°121-Rhone, Tableau historique de le vaccine; "Rapport sur la vaccine fait au nom de la commission nommée par la société de médecine de Lyon," *Recueil des actes de la société de santé de Lyon*, II, 445-490.

[59] *Rapport du comité central*, 30-2, 438; *Recueil périodique de la société de médecine*, XV, 328-341.

[60] Colon, *Histoire*, 106-164, 267-271; *Rapport du comité central*, 427-438. These figures include the annexed areas of Geneva, Belgium, and the German left-bank of the Rhine.

4. The French medical profession of the Napoleonic period was alert to new ideas; at the same time it was cautious, refusing to accept Jenner at his word until after thousands of tests had confirmed it;

5. The personnel of the Consulate was decidedly favorable to the discovery and its members aided personally in its introduction. None were more instrumental than the well-known Talleyrand. Although there is apparently no evidence of Bonaparte's attitude toward the new immunization during these years, his policy of reconciliation and his permission for the return of many of the *émigrés* played an important part in its introduction. And so politics and science interact and both are part and parcel of the history of human development.

FRONT VIEW OF RESTORED MARINE HOSPITAL
OF CHARLESTON, S. C., 1941.

UNIV. OF MICH.

THE MARINE HOSPITALS OF CHARLESTON

JOSEPH IOOR WARING

In a growing seaport town such as Charleston was in its early days the need soon becomes apparent for provision for caring for the physical ills of mariners. On the whole, seafaring men are not likely to accumulate the means for supporting themselves in sickness of any duration, and consequently being often far from home they are likely to become public charges in whatever port they may come aground. Recognizing this fact, seacoast communities and governments of maritime countries have at various times and in various ways sought to handle the inevitable situation by providing hospitals for this class of men, and have sought to defray the expenses of such undertaking by levying duties on ships entering the ports, by deducting sums from the wages of seamen, or by appropriating public monies for the purpose.

For many years Charleston was without specific provision for the hospital care of seamen, or indeed for any of its indigent people. About 1736 a general hospital was erected under the direction of the Vestry of the Parish of St. Philips [1] and about 1738 a better building of brick replaced the early structure on the "Old Burying Ground." [2] This was the area surrounding the present administration building of the Robert Mills Manor on Franklin Street.[3] Before this time the Vestry, being charged with the care of the poor of the parish, had found it necessary to provide lodging and unskilled nursing in such dwellings as would receive patients, but such arrangement proved very unsatisfactory and expensive.

[1] An Act appropriating the present Work House for a place of Correction: for building a Poor House and Hospital . . . etc. McCord, D. J.: Statutes at Large of South Carolina, Columbia, 1840. 7: 90.

[2] St. Philip's Hospital in Charlestown in Carolina. Waring, J. I., *Ann. Med. Hist.* N. S., 4, 283-289.

[3] As Early as 1680 the Proprietary Government appropriated four acres of land for a common burial place—the land is bounded now by Queen, Franklin, Logan, and Magazine Streets and the Poor House, gaol, and St. Philips Hospital stood on it. Roberts, B., & Toms, W. H.: *The Ichnography of Charles-Town at High Water.* Published June 3, 1739.

Under the new arrangement the hospital took in seamen as well as other unfortunates, for in the records [4] are to be found lists of patients which include "a poor sailor who had lost a leg and an arm" and "a mariner with a venereal disorder."

As the town grew the facilities afforded by the Hospital became inadequate, and perhaps seafarers were not good patients to mix with the townspeople, for an act [5] was passed in 1749 providing for a "public hospital for all sick sailors and other transient persons," who were to be attended by a matron, assistant nurses, servants, and others. Probably the old hospital had not been able to accommodate all ailing seamen, and the overflow had proved undesirable, for the preamble of the act stated that "the harbouring . . . of sick sailors . . . in the several little punch houses in the most crowded and confined parts of Charlestown, hath proved very offensive and injurious to many of the inhabitants . . . by reason of the noisome smells emitted from the said houses."

We can only assume that this early marine hospital was erected about 1749 or 1750, as no account of its building or its activities seems to have survived. Like the earlier hospital, it was to be conducted by the Vestry of St. Philips.

In 1768 provision was made by the assembly for erecting on or near the site of the existing parish hospital a new and larger brick building to care for the increasing number of the indigent sick people of a growing community, and shortly afterward this hospital was constructed. It would appear that by now the care of seamen had devolved upon another institution, the Marine Hospital proposed in 1749. That a separate hospital existed is indicated later by the passage in City Council in 1787 of an "ordinance for the appointing Commissioner to superintend the Marine Hospital, established in this City." [6] Another ordinance [7] stated that "it shall be the duty of the surgeon of the hospital and poorhouse, to visit the sick at least once in every two days . . . and give them all

[4] Minute Book of St. Philip's Vestry. Manuscript in possession of the Vestry of St. Philip's Church, Charleston, S. C.

[5] Statutes at Large of So. Car. 3: 720.

[6] Ordinances of the City Council of Charleston: Edwards, Alex., Charleston—1802. Ordinance 48, p. 46.

[7] *Ibid.* Ordinance 56, p. 55.

necessary medical and chirurgical assistance," though a note stating that the Marine Hospital was not at that time under the direction of City Council leaves the question of its management obscure. Later an ordinance [8] concerning the salary of the physician and surgeon of the Poor-House, Orphan-House and Marine-Hospital proposed to diminish the proportion of the salary heretofore borne by the funds of the Marine Hospital, which funds were those obtained under an "Act for Levying a Duty on Shipping for an Infirmary for Seamen." [9]

The hospital evidently carried on considerable activity. In the minutes of the Medical Society of South Carolina October 25, 1794, appears the following: "Dr. Stevens delivered to the Society a List of Seamen entered into the Marine Hospital of Charleston from the 11th. July 1794 to the 3rd. October 1794. By which appears that during that period 42 persons were admitted: of which 32 were attacked with the epidemic fever" i. e. yellow fever.

The way of the Marine Hospital was not smooth. Perhaps the successors of those citizens who in earlier years were offended by smells produced by the sailors were the element which induced the Grand Jury of 1797 to make the following complaint:

> We present as a grievance, the Marine Hospital being kept in its present situation—this is on the representation of a respectable committee of the inhabitants of that neighborhood, who say that during last summer, mortality was more experienced in that part of the city than any other. We earnestly recommend an attention to this presentment, and that some measures be fallen on to quiet their fears, and at the same time to provide for the accommodation of the valuable body of men, for whom that humane institution was included.[10]

To this the City Council replied:

> That your committee have enquired into the state in which the marine hospital is kept and the expedience of removing it from its present situation, to some other part of the city, less inconvenient to the inhabitants thereof; and are thereupon of opinion, that from its cleanliness no danger is to be apprehended from it in its present situation, before some more suitable place

[8] *Ibid.* p. 82.

[9] Statutes at Large of So. Car. 4: p. 657. Act No. 1258. Passed March 8, 1785. Only the title survives.

[10] *City Gasette* (Charleston). June 22, 1797.

can be had, which as soon as may be, your committee of the marine hospital be authorized to contract for, and required to remove it thereto. . . .[11]

From certain advertisements in the *City Gazette* of about this date it would appear that patients were removed to temporary establishments at some distance from the complaining citizens, for on December 16, 1799, there was advertised for rent " The House and Garden in King-street, formerly the Marine Hospital " and on April 18, 1800, a small house " near the Marine Hospital on the Meeting-street road " was offered for sale. It seems likely that these were temporary quarters used until a better arrangement could be made.

By 1799 responsibility for the care of seamen appears to have passed in theory from City Council to the federal authorities, for Council received a letter from the Collector for the Port stating that he had been directed by law to make provision for the relief of seamen, and that the City had been divested by Congress of the funds hitherto appropriated. The Committee of the Marine Hospital was accordingly directed to refuse admission of seamen and to turn over to the Collector all invalids in the hospital. All employees from physician to attendant were discharged and presumably the hospital was to cease to function as a city institution.[12] About a week later notice appeared that Col. Thomas Mayberry had been appointed steward of the Marine Hospital by the Collector of the Customs.[13] These changes were consequent upon the passage by Congress in 1798 of " An Act for the relief of sick and disabled seamen," which provided for a levy on all ships of the United States, and use of funds so received for the care of seamen, and eventually for the erection of hospitals for them.[14] In 1802 the United States government proposed that the city care for seamen in distress and that necessary funds would be furnished for the purpose but this proposition was not accepted until 1804.

The sequence of events here becomes confused. No available

[11] *City Gazette & Daily Advertiser* (Charleston). July 27, 1797. P. 3.
[12] *Ibid.* Aug. 6, 1799, p. 4.
[13] *Ibid.* Aug. 14, 1799, p. 3.
[14] A Collection of the Laws of the United States relating to Revenue, etc. Gordon, Thomas F. (For Treasury Dept.) Phila. 1844, pp. 51-139.

record indicates whether the federal authorities took over and operated the Marine Hospital or whether there was some temporary arrangement whereby the city carried on as before. The city directory of 1802 lists the "Commissioners of the Marine Hospital." Evidently negotiations between city and federal authorities were in progress. A proposition from the latter that $15,000 be paid to the City for the building of a Marine hospital was received with doubts, even though all "hospital monies" collected at the port were to be turned over to the City to defray the operation of the institution. City Council thought the promised sums inadequate, and requested the passage of an act enabling it to impose a duty on the tonnage of vessels entering the port. To this request Congress agreed, and a tax of six cents a ton was authorized in 1804.[15]

February 1, 1805, City Council designated seven commissioners for the Marine Hospital, and empowered the board to appoint a steward, matron, nurses and all other necessary persons (except a surgeon, who was to be elected by City Council) and to make regulations, subject to approval by council. The surgeon was to hold office during good behavior (political, rather than medical, we judge) and was to furnish services and medicines for an annual salary of $1200. At a later date (1816) other salaries were fixed—$300 for the steward, $200 for the matron and $144 for each nurse, besides subsistence and medical care.

In 1805 the physician of the Poor House was requested by the Commissioners of the Poor House to attend "the patients under the department of the Marine Hospital, which may be received into the Poor House until further arrangement shall be made respecting the Marine Hospital."[16] Five months later the Master of the Poor House asked for extra compensation for the care of the Marine patients. January 6, 1806, the Poor House Commissioners, a Committee of Council, and the Commissioners of the Marine Hospital met "at the Marine Hospital" for a conference. A city directory of 1806 locates the Marine Hospital on S. Magazine Street, behind the gaol. Dr. George Hall was Doctor and Surgeon to the hospital.

[15] Acts and Resolutions of the General Assembly of the State of South Carolina as relate to the City of Charleston. Charleston 1807. p. 21.

[16] Minutes of Board of Commissioners of the Alms House, January 28, 1805.

A directory of 1809 speaks of the Marine Hospital as being on Queen Street, north side, west end. In 1813 Dr. Henry C. Glover was the physician to the hospital.

In 1824 a building was erected in the Marine Hospital yard to serve as a lecture hall for the Professors of the medical school established by the Medical Society of South Carolina.[17] In the 1829 directory the hospital was described thus—" in Back street, near the Medical College, is a place of refuge for the sick and wornout sailor. Here he has the best medical aid Charleston affords." Dr. Elias Horlbeck was physician then; Dr. H. R. Frost had succeeded him by 1831.

In 1816 Congress had allowed the City to impose a duty on tonnage of shipping to support the Marine Hospital. In the same year the city was authorized to contract with the United States for the maintenance and control of a Marine Hospital. In 1815 a site was purchased for building a new Marine Hospital at Hampstead. Not until 1830 did Congress appropriate sufficient funds ($25,000) to carry out the design. When it became apparent that Charleston was to have a new Marine Hospital, federal authorities turned for a plan to Robert Mills, designer of so many government buildings and of so many Marine Hospitals. New Orleans, and other cities had hospitals designed by his pen, and Charleston was now to have a building comparable to others of like nature. Of the time and details of Mills' designs we know little, though it is recorded [18] that he was paid $300.00 for " designs, estimates, drawings and specifications." Toward the end of 1831 Mr. Homans, the contractor, arrived in the city and the public land was turned over to him.

The land intended for the site of the hospital, proved unsatisfactory and was shortly afterwards exchanged for another lot described as follows: " Bounding North on the Jail lot, Land belonging to the state aforesaid, East on Land belonging to the City Council of Charleston, south partly on Land belonging to the City

[17] Minutes of the Med. Soc. of So. Ca. August 2, 1824—Manuscript is possession of the Society.

[18] An Account of the Receipts and Expenditures of the United States for the Year 1831.

Council of Charleston, and partly on the Lot of the Medical College, and West on Back street, measuring on the North line 202 feet 3 inches, on the East line, 111 feet 5 inches, on the West line 112 feet 6 inches."[19]

Construction proceeded steadily, but an unfortunate accident delayed the opening of the building. The (Charleston) *Courier* of August 5, 1833 says that "during a violent thunder storm which occurred yesterday (Sunday), the Marine Hospital, a new edifice not yet completed, was stricken and considerably injured. It is probable that the electric fluid entered at the South East chimney, the top of which it tore off, and then separated into three streams, one descending the South East corner, splintering and scorching the window frames, tearing out the iron pullies attached to them, and breaking the glass. The second stream descended the middle of the Eastern wall and destroyed a portion of the plaistering on the inside, which being fresh, showed the marks of the splinters which were stripped off and dashed against it. It then descended to the ground, tearing off a part of the lower eastern door. The third stream descended through the center of the building, shattering some of the studs to pieces, and stripping off the plaistering, leaving marks of its having followed the direction of the nails, which secured the lathing. The circumstance of there being no lightning rod erected for the protection of the building, will probably account for the different directions taken by the fluid in its passage to the ground. There was, we understand, no persons in the edifice at the time of the accident." After some protests as to the condition of the building the City commenced operation of the institution in 1834.

Medical attendance at the Poor House and Marine Hospital was supplied in and before 1831 by the Faculty of the Medical College. Dr. Boyleston held the office of attending physician in 1831. In 1833 a committee from the commissioners of the Poor House and of the Marine Hospital granted permission to the students of both the existing medical colleges to visit the hospital.[20] An announce-

[19] Charleston County Records. Mesne Conveyance Office. Book F-10 p. 40.
[20] Minutes of Board of Commissioners of the Alms House, Nov. 1, 1833, pp. 417, 418.

ment by the Faculty of the Medical College of the State of South Carolina [21] read

The Faculty of the Medical College of the State of South Carolina announce that the organization of the school being completed, it will commence its operations at the approach of the ensuing winter.

. . . The Marine Hospital and Alms-House, are placed by the direction of our City Council . . . under the care of the Board, being thus made subservient to the Advancement of Medical education while rendered more useful in supplying relief to the destitute and afflicted. The former of these charitable institutions, is about to be removed to a very large and convenient building nearly completed by the United States Government, which is calculated to hold no less than 60 beds. Owing to the peculiar locality of our city and its great commercial activity, the Wards of both the Alms house and the Hospital usually offer to the attention of the diligent pupil a large number of cases and a very extensive variety of forms of diseases and injury. Clinical lectures will be delivered in each institution during the Winter, by the Physicians and Surgeons in attendance. . . . .

SAM'L HENRY DICKSON, M. D., Dean

In 1833 Dr. A. E. Gadsden was elected Physician to the Marine Hospital. Dr. William G. Ramsay was in charge [22] in 1836, and gives this description of the new hospital:

The Charleston Marine Hospital was built by the United States Government, in 1832 (sic). It is a commodious and airy building, fronting the west, and has double piazzas to the north, south and west, which are appropriated to the use of the patients. The front part of the building is occupied by the steward and his family. There are eight wards—three on the first floor, for surgical cases, and five on the second floor, one for venereal cases and four for medical cases. This institution is exclusively for seamen, both American and foreign; the former are admitted by the collector of the port, who pays into the city treasury sixty cents per day for each seaman, who has a protection, which proves that he has paid to the government hospital money. No American seaman is allowed to remain longer than four months in this institution; they are then considered as chronic cases, and must be sent by the collector to their native place. Foreign seamen are admitted by the Commissioners of the institution, with the captain of the vessel or the consul as security for the payment of their board in the hospital, which is seventy five cents per day. The wards of the institution are open to all students of medicine visiting the city for instruction. Having derived much advantage from the clinical instruction in the Alms-House and Hospital

[21] *The Courier* (Charleston). May 21, 1833.

[22] Ramsay, W. G.: *Amer. Jour. Med. Sci.*, 18: 47-48 (1836).

in Philadelphia, it has been my endeavor to render this institution a source of instruction to students prosecuting their studies in this city. For the attainment of this end, there are clinical lectures delivered every Wednesday and Saturday mornings during the session of the colleges. The students are also allowed to visit with the physician every morning, if they wish. A note-book is kept, in which is accurately recorded a minute of the history, treatment, and post mortem appearance of all cases of importance, to which all the students have access.

The City Directory of 1837 speaks of the Hospital as follows:

This is a noble edifice, erected in 1833, by the United States Government, near the site of the old Hospital, and is appropriated exclusively to the use of seamen. It is situated on the east side of Back-street in the rear of the Medical College, upon the square appropriated to public buildings.

The management of the establishment has been transferred to the City Council of Charleston, and is now, like the former, subject to municipal authority. Its expenses are met by the City, whenever the United States Hospital money (paid by every sailor) is insufficient. The number of patients annually admitted into this institution, is about 200. Their diseases though numerous and many of them acute, furnish of course a less variety than the Alms House, inasmuch as persons of both sexes are admitted into the latter. It is however, an admirable school for the student of medicine. The physician and surgeon is annually elected by the faculty of the Medical College of South Carolina, under precisely the same regulations as the Physician of the Alms House, and is required to give a course of Clinical Lectures to the students of the College, whence he receives his appointmnt. To both institutions students have daily access for the examination of the cases, and have abundant opportunity to acquire practical knowledge by minute personal observation.

A contract made February 20, 1834 describes the terms under which the city was to handle the hospital.[28]

Where-as the Said United States of America being seized of an absolute estate in fee simple of and in a certain Lot of Land situated in Back Street in the City of Charleston State aforesaid have caused to be erected thereon a United States Marine Hospital for the sick and disabled seamen at Charleston aforesaid and whereas the said United States of America have agreed to commit the charge and management and to deliver the possession of the said marine hospital, and ground appurtenant thereto, to the said the City Council of Charleston to be held by them from the day of the date of these Presents, for such time and so long as they the said City Council

[28] Letters on Marine Hospitals—1846-47; p. 133. Treasury Department.

of Charleston shall continue to do all the Acts and perform and keep all and singular the covenants and agreements herein after mentioned and expressed, and on their part hereby agree to be done and performed.

Now these presents witness that in consideration whereof the said the City Council of Charleston do hereby covenant and agree to and with the said the United States of America in manner following (that is to say) that they the said the City Council of Charleston from time to time and at all times from henceforth at their own costs and charges shall and will find and provide all sick and disabled seamen who may be entitled to relief in the said marine hospital, and who may be admitted to the benefit of the same upon the certificate of the Collector of the Port of Charleston, with good and sufficient meat and necessary subsistence, medicine and medical attendance and advice, nursing—proper necessaries during sickness and all other aid required for sick and disabled seamen employed in the Merchant Service (they) the said the United States of America paying to the said the City Council of Charleston for each seaman admitted to the benefit of the said marine hospital in manner as aforesaid the sum of Sixty Cents per day for a period not exceeding four months from the day of his admission and that the Government of the said United States of America may have the means of ascertaining the condition of the patients admitted to the benefit of the said marine hospital in manner aforesaid and whether the terms of this contract are complied with, the Collector of the Port of Charleston or other authorized agent of the Treasury Department of the said United States of America shall at all times from henceforth have free liberty to enter into the said marine hospital, and upon the said premises, and every part thereof, to examine and inspect the wards in which seamen are lodged and view the condition thereof and that they, the said, the City Council of Charleston shall and will at their own proper costs and charges well and sufficiently furnish the said marine hospital, and all times from henceforth preserve and keep in good and sufficient repair the said marine hospital, fences, out-buildings, and all other things belonging to the aforesaid premises.

In the yellow fever epidemic of 1852 some 40 cases were handled in the Marine Hospital. In 1856 a large number of cases of this disease were handled there.[24] Dr. J. C. Cain was the hospital physician at that time.

Upon the outbreak of the War of the Confederacy, by order of Governor Pickens the Marine Hospital was converted into a military hospital, with the officers of the City still retaining possession. Letters between Dr. F. Peyre Porcher and Dr. R. W. Gibbes, Surgeon General of the State, describe the status of the hospital:

[24] *Am. J. Med. Sci.*—N. S. 21 : 564.

Marine Hospital
Charleston, S. C.
December 29, 1860.

His Excellency Governor Pickens:
Sir:

Having been for the past four years physician and surgeon to the Marine Hospital (an institution in this City belonging to the late Government of the United States but farmed from it by the City Council of Charleston) I take the liberty of most respectfully suggesting to your Excellency that it be converted into a State Hospital for the reception of soldiers as well as seamen, requiring treatment under cover.

The Hospital has been under the civil management of commissioners appointed by the City Council and I received my appointment from the Faculty of the Medical College of South Carolina, who for value received from the City Council, and upon condition that clinical lectures should be delivered to the students, agreed to furnish medical attendance. This was formerly performed by one of the Faculty, but for several years past they have usually made an honorary appointment of physician and surgeon from among the physicians of the City. In this capacity, I have been attending the hospital for the preceding four years. The hospital accommodates a steward and his family and has beds for forty or fifty patients who receive admission through the Collector of the Port. It is now supplied by a corps of nurses who for several years have been trained to service; and, I would suggest that it now furnishes a most convenient and suitable place of reception for those requiring medical and surgical aid. A large room used only for the occasional visits of the Board of Commissioners could easily be converted into wards for the reception of a larger number of sick, and after consultation with the Surgeon General, other things might be made, if required.

The hospital also contains all the necessary surgical instruments and other appliances, found in a first class institution, accumulated during many years. The medical stores now there were furnished by the City Council of Charleston, under the direction of the Commissioners, above mentioned, and the physician. The undersigned communicated with General Harlee, Dr. R. W. Gibbes, and General Jamison, signifying his willingness to enter the service of the State and to undertake any duties required of him which might be deemed necessary in the present or any other emergency.

I may add that the contract between the City Council and the Faculty of the College has long since expired by its own limitation but things have been permitted to remain in statu quo until the recent forcible disruption of the relations between the State and the General Government has compelled a readjustment.

I have the honor to be Very respectfully,

/a/ F. Peyre Porcher,
Physician and Surgeon to Marine Hospital."**

** These letters in proceedings of City Council of Charleston.

The above is a true copy of Dr. F. P. Porcher's letter to Governor Pickens.

On the envelope was endorsed—

"Dr. Gibbes, Surgeon General of the State, is ordered to take immediate possession and continue the writer of the within.

Signed, F. W. PICKENS"

Upon this order, I appointed Dr. Porcher surgeon to the hospital.

Signed, R. W. GIBBES, M. D."**

"Surgeon General's Department
December 30, 1860.

Dear Sir:

I am instructed by Governor Pickens to take immediate possession and control of the Marine Hospital.

I take pleasure in appointing you surgeon to the Hospital. You will continue the present arrangements and make a requisition on me for what may be required to furnish it fully for service.

Respectfully yours,

R. W. GIBBES, M. D., Surgeon General."

To Dr. F. PEYRE PORCHER." **

In 1861 by resolution of City Council (September 7) the hospital was placed "pending existing troubles" under the control of Surgeon A. N. Talley, Medical Director of the Confederate Forces in South Carolina, but provision was made that "sick and disabled seamen shall be duly cared for."

Later in the year, in accordance with a resolution of the Confederate Congress to the effect that Marine hospitals be placed under "Corporate or State authority" rather than under the Confederate Government, the municipal authorities of Charleston agreed to retain the management of the hospital. They reserved the right to make charges for maintaining foreign seamen and soldiers of the Confederate Army.

Apparently the hospital was operated on this basis to the end of the War. On October 31, 1865, the Board of Commissioners repre-

** These letters in proceedings of City Council of Charleston.

sented to the Mayor that the building was in very bad condition, and recommended that the hospital be transferred to the control and management of the United States Government.

The Collector of Customs wrote that the building had been so much injured by the bombardment of Charleston that it was wholly untenantable and could not be repaired without great expense [25] and another letter from an architect states "the building is nearly if not quite worthless for hospital purposes and has none of the conveniences so indispensable to a proper hospital building such as water closets, baths, etc. It is dirty and dilapidated and has in addition been much injured by shells during the recent bombardment.

"This building has been under the control of the City of Charleston by an arrangement between the United States and the City. A resolution has recently passed the City Council to surrender the property again to the Government. I do not consider the building worth repairing, or of much value for hospital purposes when repaired. I therefore recommend the sale of the property." Accordingly arrangements were made with the Roper Hospital for the care of sick seamen, and ever since that time a similar arrangement with hospitals of the city has been in effect.

Thus ended the career of the building as a hospital. The fortunes of war were still not bad enough to ruin the usefulness of the damaged structure. Rev. A. Toomer Porter, seeking quarters for a negro school, set about acquiring the property. He describes the developments as follows: [26]

> Bishop Davis . . . at the Episcopal Convention of February, 1866 in Grace Church . . . discussed . . . the education of the freedmen, and their instruction in the Christian doctrine of the Church . . . and resolutions were passed advocating the work. . . . Immediately after the adjournment of the convention, Mr. Trenholm (George A.) and myself conferred on the subject. . . . We . . . set out to look for a building, to establish a colored school. Mr. Trenholm thought it would do harm to select any inferior or obscure building, and we settled on the Marine Hospital belonging to the United States Government as just suitable. The place had been condemned and was not in use. How to get possession of it was the question. The Bishop said ". . . this diocese, unaided, cannot . . . open a school for colored

[25] Letters on Marine Hospitals, 1865, Vol. 2.

[26] Porter, A. Toomer: *Led on*: New York. G. P. Putnam's Sons, 1898, pp. 209-210, 222-223, 225.

children, and some one must go North to raise money. . . . I am going to send you (Porter)."

On the 4th of April, 1866, I sailed in the steamer for New York, . . . After finishing my engagement at Grace Church, New York City, I then went down to Washington, and called on General O. O. Howard, . . . He was at the head of the Freedmen's Bureau. I showed to him the resolutions of our Diocesan Convention and told him of Mr. Trenholm's and my selection of the Marine Hospital, . . . that as it had been condemned . . . we wished to get the government to sell it, that I had nearly five thousand dollars towards its purchase. He took me to the White House to see President Johnson, introduced me and told the President my object. The President listened very attentively . . . and turning to General Howard said ". . . get a bill through Congress authorizing the sale of the Marine Hospital and I will sign it." Then taking up his check book he filled out a check for a thousand dollars and said " That is my subscription towards its purchase."

General Howard undertook to frame the bill, and had it passed. The President signed it and the building was ordered sold. I telegraphed Mr. John Hanckel to buy it for me. No one supposed it would sell for more than our first bid of one thousand dollars, but Mr. Yates, the Seamen's Chaplain, who was very much disconcerted at the sale of the Marine Hospital, bid on it and ran it up to nine thousand eight hundred dollars. Hanckel's mettle was up, however, and he was determined to have it. It was knocked down to him for me. He telegraphed me the amount; I was staggered. However, I went to General Howard, and told him the situation, and somehow between the Freedman's Bureau and the Treasury, they arranged it so that a deed of gift was made in trust to me, Mr. George A. Trenholm, and Mr. Bennett, a colored man. The only condition they added was that there should be no restriction to any one in using the advantages of the institution on account of color, race, or previous condition, the Board to be self-perpetuating. The money I had collected at the school was to go for repairs and furniture. . . . I returned to New York, . . . (and went) before the Board of what was called the Protestant Episcopal Commission to the Colored People of the South. . . . The result was the Board . . . determined we should have $6000. a year for the colored school, provided that, as principal, a white man from the North should have charge. . . . The building was repaired, furniture procured and the school was opened with a roll of 1800 colored children. . . . Fifteen Charleston ladies, at a salary of $500 a piece . . . kept the school going for four years, when the facilities for the education of colored children in Charleston exceeded those of the white, and as the interest flagged in the North, the appropriation fell off, and I turned the children over to the city's care. Thus, at the suggestion of the Bishop, and by virtue of the resolutions passed in the Diocesan Convention, the first large school for colored children opened solely by the white

people in the South, was here in the city of Charleston. When the school was closed, I turned the building over to St. Mark's congregation and we established a library, and a general meeting place for instruction and amusement, which was kept up while I was rector of that church, but fell through and remained idle until 1895, when a Mr. Jenkins, a colored Baptist preacher, . . . obtained from me, the sole surviving trustee, a temporary lease for a colored orphanage, until such time as I hoped the city would take the matter in hand, when I could make such disposition to them as the trust allows.

For many years Jenkins Orphanage occupied the old hospital, until in 1938 the property with adjacent lands was acquired for construction of a settlement of neat brick houses which were to replace the dilapidated dwellings of the neighborhood and to furnish at small cost (theoretically, at least) satisfactory homes for people of low income. The west end of the structure was restored in part, and the east wings were demolished. The restored portion of the hospital is now the administration building for the housing project, known as Robert Mills Manor in honor of the designer of the old Marine Hospital of Charleston and of innumerable other buildings far better known.

THE SIGNIFICANCE OF THE OBVIOUS

An Eighteenth Century Controversy on Psychosomatic Principles

RICHARD D. LOEWENBERG
San Francisco, California

> "All features, contours, all passive and active movements, all positions and attitudes of the human body, all traits whereby the suffering or acting man can be immediately perceived—all this is the object of physiognomy."
>
> (Johann Caspar Lavater, 1741-1801)

> "Prevalent opinions, which everybody takes for granted usually deserve our most careful investigation. Judgement is pronounced upon nothing more hasty than upon the character of men and yet one should be in nothing more cautious."
>
> (Georg Christoph Lichtenberg, 1742-1799)

The Obsolete Science

The medical profession's rule in ethics has always been, to *see* a patient first before giving any judgment. This fundamental psychosomatic principle was called physiognomic in the Eighteenth Century. It is proposed here to show, that in those days the basic problems of psychosomatic relationship were clearly recognized and that their possibilities and limitations were thoroughly discussed in a classical controversy. The foundations as laid down first in modern times by Lavater, whose two hundredth birthday falls in this year, are just as valid today as the critical objections of Lichtenberg, who exposed in his parodies the dangers of criticless exaggeration.

Today everybody talks about the Mind Body Unit of the "organism as a whole," the creed of modern medicine. Indeed one should expect that the physician should be the most enthusiastic defender of physiognomy. But this word has become nearly obsolete and forgotten. We find its literature in bookstores on the shelves labelled: Occultism. However, the physician observes more often than anybody else that the patients greatly suffer when they are deprived of the tools of physiognomical expression as in injuries

of the face, Parkinsonism, facial palsies or aphasias. But only a few modern authors have studied systematically the facial expression. (Huber,[3] Kirchhoff[10]) Is it that doctors, sceptical by nature, are too fearful to go astray in interpreting physical, endocrinological and neurological changes as mental expressions?

Most academic psychologists superiorly reject questionable physiognomic statements by statistical methods without considering the whole context (e. g. Warren[7] Paterson[6a]). But did not the greatest geniuses as Leonardo, Goethe, Darwin, and even Pawlow and Freud (although rarely conceded) pursue physiognomic studies? Do not personal interviews count nowadays more than ever in business, politics and private life? Was ever a greater vogue of picture taking and picture magazines than today? From the waiter on, who immediately sizes up the entering customer's tip—until the legally recognized personal signatures and fingerprints: our daily life practices physiognomy constantly—independent from science's sceptic attitude.

The many new names for the science of man with all its ramifications should not blind us about its common source and heritage. It is true, it sounds more modern to inaugurate Psychosomatic Medicine, Constitutional Research, Endocrinology, Gestalt Psychology, Eugenics, Psychobiology, Graphology and Characterology. We do not underrate the progress by so essential standard works as Kretschmer's Physique and Character; H. Dunbar's Emotions and Bodily Changes; Schilder's The Image and Appearance of the Human Body; Sheldon's Variety of Human Physique; G. W. Allport's Personality etc. Without going into the details of the history of the problem, (well surveyed by Ciocco[2]) it shall be shown that the common root of all these modern specialities is the nowadays obsolete and forgotten physiognomy of the Eighteenth Century.

The Physiognomic Fragments

Often in medical history non-medical men have stimulated its progress in new directions. The Swiss theologian Johann Casper Lavater (1741-1801), the son of a physician, belongs to these distinguished outsiders. He was inspired to his studies by the world known Swiss physician Johann Georg Zimmermann (1728-95) (Fig. 1). Looking down from his window in Hannover on a military parade,

Zimmermann was struck by a casual characterological brilliant remark of Lavater, whom he induced to lecture on this subject. He secretly printed Lavater's even nowadays still very readable first essay

Fig. 1.

JOH. GEORG ZIMMERMANN.

on physiognomy and started thus overnight the physiognomic vogue. Zimmermann stood really at the cradle of Lavater's fame. In the following years (1775-1778) the Fragments on Physiognomy were published in four illustrated volumes, in German, English and French. They were followed after his death by Physiognomical Rules, his weakest work. (Figs. 2 and 3.)

Fig. 2.

Self portrait of Lavater, 1766.

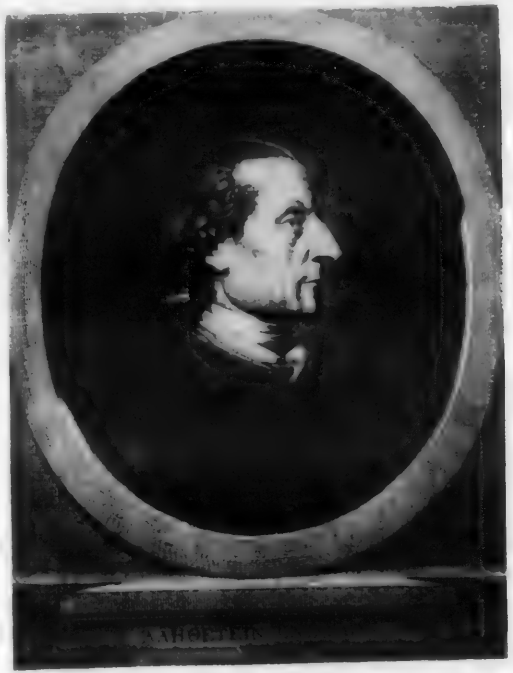

Fig. 3.

Lavater: Physiogn. Fragmente.
(Vol. IV, plate 43.)

An immediate influence on America was not possible, as his main works came into vogue at the time of the War of Independence. There is however a common background in the philosophy of the Eighteenth Century regarding men's nature, as expressed in the faith of the Quakers of the "awareness of something of God in every man." America learned first about Lavater indirectly and mutilated by the phrenologists, whose history has often been told. Only recently academic psychology returned to the original Physiognomy. Certainly no other country offers better illustrations of national physiognomies and their transformation to a new type as America.

Lavater, contrary to general belief, defined physiognomy in its widest range, including the physiognomy of diseases, of the voice, of the speech, handwriting and gait, of cities and nations: "What knowledge is there, of which man is capable that is not founded on the exterior. The relation that exists between visible and invisible, the perceptible and imperceptible, I feel disgust at being obliged to write thus in order to convince the learned of truths, with which every child is or may be acquainted: All men unconsciously more or less are guided by physiognomic sensation, that is to say, by the intuitive feeling of the agreement between the internal character and the external form."

Lavater was a prolific religious writer. In a broad sense all his literary activities concentrate on religious improvement. The title of his main physiognomic work even stresses this inspirational purpose: Physiognomical Fragments for the *Promotion* of Knowledge of Man and Love of Man, with the motto: And God said "Let us make man in our image, after our likeness." (Fig. 4.)

We do not feel with Allport, who otherwise does full justice to Lavater, that one should overlook his moral preachings, so essential for his understanding. His passionate curiosity of seeing reflects his religious experience, his "psychosomatic faith." The ever present religious undertone makes his writing so suspicious and unacceptable to modern minds trained in the ideals of natural science.

The Physiognomic Sense

The Eighteenth Century believed in enthusiastic perception and reflection, today called inference and intuition (Allport [1]). It is here

not the place to discuss the prescientific nature of the undifferentiated orientation through the whole impression, which is common to

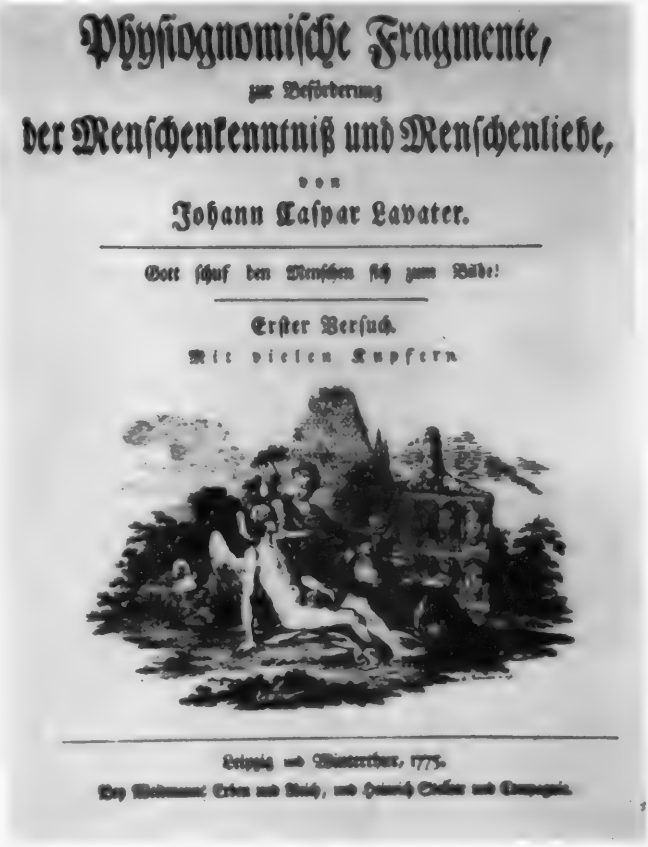
Physiognomische Fragmente,
zur Beförderung
der Menschenkenntniß und Menschenliebe,
von
Johann Caspar Lavater.
Gott schuf den Menschen sich zum Bilde!
Erster Versuch.
Mit vielen Kupfern

Fig. 4.

Title page of Physiognomic Fragments.

primitives, children and patients with brain trauma (Werner [8])—but also to artists and scientists. Although it has no official standing any more in science, even in our days many exact scientists as e. g. the late neuro-psychiatrist Southard secretly indulged in the study

of the obvious (Menninger"). And does not the general appeal and resonance of physiognomic works prove that a most essential human string is touched which should be understood?

Nobody has better circumscribed the omnipresence of the physiognomic sensation than Lavater. "All our truth must be truth of the surface. Not the reading on the surface is the source of our errors—in that case it would not give any truth for us—but the not reading, or which is just as much: the not right reading. Perhaps one finds it ridiculous to derive physiognomic observations from a bone or a tooth. I find it just as natural as from a face."

There is no need for any elaboration here, how unquestioned Criminology and Forensic Medicine practise this method today as a matter of fact in all their different branches; Paleontology's studies are only possible by this method.

Closely related is Lavater's faith in the totality of the individual as a whole, the organic nature of man: "Each part of an organic whole is an image of the whole, has the character of the whole. Nature does not patch up—nature works from one center towards the whole. Another hand than I have, would demand a totally different proportion of all parts of my body, consequently a totally different modified body—that is, my mind would see the world by quite a different instrument from another angle—and then I would be a different man—that is truth to me, as my very existence."

These convictions of the radical consistency and homogenity of personality would hardly fit into some modern assumptions of constitutional types (dysplasia) and heredity, which is rather generous with admixtures, bastardizations, opening without its knowing the doors to very unscientific political generalizations for theories of race. Present day degenerations of this branch of physiognomy were unthinkable for Lavater, whose religious ardour searched for the "immortal stranger in the human shell."

He was so convinced of the unique dignity and essential integrity of man that he ridiculed the militarization of human spirit: "To force a man to think and feel like me—means to impress on him my brow and my nose—an unpardonable sin." He recognized the constitutional limitations of free will and education, a view unpopular in the age of Rousseau.

It is remarkable that in the diagnostic field the theologian Lavater enjoyed seeing corpses, he advised the observation of newborns, sleeping persons and visits to lunatic asylums, expecting special information from the study of the extreme. The observer should try to remain unobserved, and collect a supply of descriptive words, quite in the manner of modern psychiatric and psychological textbooks. Furthermore he suggested medical semiotics for prognostics of possible or probable disorders and he quotes an interesting remark on the change of Swift's constitution: "He was lean; but after the loss of his understanding he became fat."

The analogy of the expressive features in speech, gait, and handwriting was often emphasized, one hundred fifty years before two other Swiss psychologists Jung and Rorschach introduced their important psychodiagnostic tests. Whereas it is unknown whether they tried them out on themselves, Lavater used his handwriting to recognize and interpret his "inconsistency and weakness of character."

The Antiphysiognomic Critics

Lavater's exaggerations and missionary zeal embittered his best friends and provoked his many opponents, who however never denied the soundness of some of his conceptions.

The young Goethe was in the beginning one of Lavater's contributors and his proof reader. His bone studies, which led to the rediscovery of the intermaxillary bone were inspired by this interest. Goethe lectured on the skeleton before art students—without ever using the term of phyiognomy but with the intention of transmitting it convincingly through his presentation. Lavater was perhaps the first to recognize the young genius, characterizing his silhouette with the exclamation: "Does everything for love." (Fig. 5.)

The friendship of these so different natures could not last. Both regretted their separation and never lost the greatest mutual esteem. Each has described how they accidentally met many years later in a dark alley. They silently passed each other in the belief of not being recognized.

Lavater lost himself too soon in the interpretation of the fixed form only, the most vulnerable and abused part of his system. The young Schiller, the former military surgeon, touched this problem

Fig. 5.

GOETHE.

Fig. 6.

GEORG CHRISTOPH LICHTENBERG.

in his essays on the relationship of man's animal nature with his spiritual nature: He saw in man's fixed features the reflection of habitual movements, the permanent traces of chronic impulses, which eventually expressed themselves in organic changes (1780).

But whereas this was only an occasional sideline of Schiller, the most adequate critic of Lavater was the professor of physics in Goettingen: Georg Christoph Lichtenberg. (Fig. 6.) He was one of the rare great humorists and aphorists in German literature, a universal spirit like Rochefoucauld, Swift, and Franklin with whom he shares the deep belief in the superiority of reason. At first glance he seems to be the contrast of the tall and radiant Lavater: a cyphotic, hypochondriac mathematician and Spinozist, who believed that God was created in the image of man, and who suggested that theologians be forbidden to make further discoveries. Opposed to all ecstatic outbursts, his keen self-observations and dream-investigations made him too a precursor of psychoanalysis (Loewenberg [5]). In 1778 he published his pamphlet: On Physiognomy against the Physiognomist for the promotion of love of man and knowledge of man—later completed by his famous Fragment on Tails, a witty parody on Lavater's style. Goethe felt that Lichtenberg's jokes always conceal deeper problems. (Fig. 7.)

Free from illusions Lichtenberg warned: "The greater the man is—the more reprehensible he is—if he gossips about the faults of others whom he recognizes. If God would make known the secret of the world—the world could not exist." The premature transference of a symbolic meaning of the fixed form to analogous changes of the mind is exposed by him as an unpardonable transgression and compared to a leap, which is not shorter than from a comet's tail to war.

Lichtenberg's classic descriptions of Hogarth's works and Garrick's acting and his unpublished characterological observations and sketches of faces after the voice prove his interest in expressive movements, which he thought adequate only for our understanding. When the two opponents met first, Lichtenberg was so overwhelmed with Lavater's personality that he wrote to a friend: "Auget praesentia famam, I did not expect such an impartial thinker, he was really extraordinary."

Review and Outlook

The physiognomic experience of these two so different men represents the two main currents of the history of physiognomy: The irrational enthusiastic interpretation and the sceptical analytical method. Lavater's merit was to single out and to concentrate on his

SILHOUETTEN.
d
a
c
Fragment von Schwänzen.
I. Heroische, kraftvolle.
A. Ein Sauschwanz.
B. Englischer Doggenschwanz.
A.
Wenn du in diesem Schwanz nicht siehest, lieber Leser, den Teufel in Saukeit, (obgleich hoher Schweinsdrang bey a) nicht deutlich erkennest den Schrecken Israels in c, nicht mit den Augen riechst, als hättest du die Nase drinn, den

Fig. 7.

Lichtenberg's Parody on Tails.

(Beloved reader—if thou seest not in this tail the devil in his beastliness . . .)

basic experience of the general laws of psychosomatic interrelations. The totality of the organism, the uniqueness of the individual, the significance of the obvious (although known before—just as the truth of Darwin and Freud) were defined and recognized in their importance first by Lavater in modern times.

This genius of heart, to whom systematic precise thinking was unknown, failed in working out special methods. Throughout his

life he tried hard and in vain to force his intuitive observations into crude measurements (" Stirnmesser "), teachable rules and methods. (Figs. 8 and 9.) His fundamental error was this touching belief of being able to rationalize his irrational experience. This incompatibility has refused since the earliest time to reduce psychosomatic views to the forms of natural science only (Jaspers,[4] Kronfeld[9]), an attempt made in our times again in Kretschmer's and Sheldon's works.

Lichtenberg's merit was to foresee a future special science of expressive movements, developed in our days by Klages and others to a physiognomy of functions, which was especially successful in the analysis of handwriting. But more important still were Lichtenberg's objections and warnings against the dangers and abuse by a unscrupulous crowd, who according to Zimmermann's early cautioning has not Lavater's eye and heart. Indeed the whole approach was brought in such disrepute by irresponsible popularizations—although hardly more than the ideas of Darwin, Nietzsche and Freud, which underwent similar degenerations.

But does this inevitable development wipe out the soundness of the original conception? No contradictory premises, no factual evidence against questionable statements can shake the strong feeling of truth in the significance of the obvious, the psychosomatic faith, which is living even in the most sceptical opponents.

At the border of art and science the psychosomatic interrelations and interpretations have to be experienced anew and to be appraised by each generation. Every new student is faced by the same temptations and dangers, inherent in the twofold nature of physiognomic investigations as art and science.

Today many new tools have increased our possibilities: photography, motion pictures, X-rays and phonograph. The progress in embryology, eugenics, endocrinology and neurology demand unsupposed conscientious differentiation. But the fundamental attitude has not been changed, although it is often forgotten in the intense absorption in detailed research problems. The observer's own humanity will always decide how far he succeeds in combining the present day demands of Lichtenberg's ruthless unmasking analysis with the old-fashioned enthusiastic responsibility of Lavater, who concluded his work with this apology:

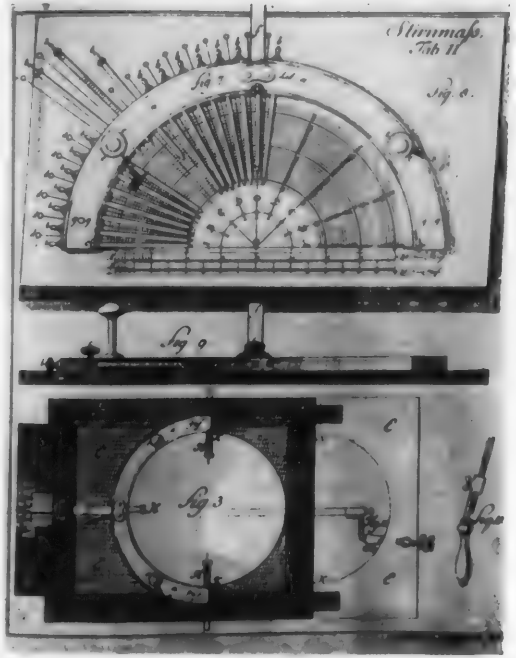

Fig. 8.

Instrument for measuring the brow.

Fig. 9.

Machine to draw Silhouettes

"I have given fragments and cannot give more. If I erred ten times or a hundred times, that proves only against my physiognomic insight, not against the physiognomy: The physiognomic sense is the bond that unites all living beings with each other."

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TEXTS AND DOCUMENTS

A FIRST-HAND ACCOUNT OF A TREATMENT BY THOMSONIAN MEDICINE IN THE 1830'S
TEXT AND NOTES

FRANK G. HALSTEAD
University of Illinois

An elderly gentleman in Bel Air, Maryland, under date "31 Xbre[1] 1837" penned, in crabbed hand and French[2] phrases Americanized by a thirty-six year sojourn in the 'States, the following lines to his eldest son,* in a medical college in Paris, France:

"You doubtless know that Mr. Knappe ** was so ill that the most distinguished doctors in Philadelphia, after having made him take an infinite number of remedies, gave him up at last. Well, he has turned to a doctor of Thompsonian Medicine,[3] who has guaranteed

[1] Not the present 10th month, but the 12th, "X" representing Latin *decem*.

[2] For verbatim transcript of original, see Addendum I. The English translation *infra* endeavors to render as exact a translation as is consistent both with correct English, and with the spirit and letter of the original. Punctuation, paragraphs, underscoring, and other devices have been carried over as set down. Bracketed [ ] words and phrases will indicate my own interpolations; they are occasional only and fairly obvious of interpretation.

* The correspondent's family name is Cherbonnier, Christian name thought to be Hector; the son is Ovide Cherbonnier.

** Philippe Knappe, who appears to have been a fellow-countryman, from other remarks not here to be cited. No indication is given as to his age or physical characteristics.

[3] Commonly rendered *Thomsonian*, after one Samuel Thomson, New Hampshire smithy whose *New guide to health* in 1822 (See Wyndham B. Blanton, *Medicine in Virginia in the 19th century*, Richmond, 1933, p. 195) became the manual of a large number of practitioners recruited both from the Profession and from the ranks of the charlatans. Their consistent but unsustained thesis was the superiority of herbs and natural remedies over Mineralism—a doctrine labelled "fanciful" by Robley Dunglison (See *The dictionary of medical science* [or *Medical lexicon*]; any edition; 23rd, Philadelphia, cop. 1903, was at hand), whose condemnation of this so-called "botanic medicine" is reflected both by medical authority of the 19th century and that of the present.

Pre-dating Dr. Wooster Beach's New Reformed System, soon to be known as the Eclectic School, Thomsonianism (or *Thomsonism*, a variant frequently

to cure him. Indeed, since he has been taking the treatment prescribed by Thompson, Knappe is a great deal better. I went to see him on the 4th of this month and found that his condition was quite different from that in which I saw him in 8bre [4] last. His malady was, according to his first physicians Consumption.[5] But some of them said it was chargeable to the lungs, others, to the liver. One, to the spleen, and others, to the throat (throat consumption [*sic, in English*]) etc. etc. The fact is that he coughed a great deal and spat up a kind of thickish stuff. Now, here is the treatment that he has taken and is yet taking. The first few days he was made to take several concoctions of serpolet or wild thyme (Penny Royal) with pepper, after having been thus prepared, he *followed the medical treatment* which Knappe describes to me thus in his letter of the 1st of November:

> 'The Thompsonian treatment is 1° a steam bath 30 minutes in duration. When the sweat rolls off as thick as your finger the body is washed with cold water and the patient is straightway put to bed with hot bricks to bring back his heat. Then a powerful vomitive is administered, composed of *bay berry*, of cayenne (red pepper) and lobelia, which suffer naught impure to remain in the stomach, and all these herbs [6] are mixed in

encountered and recognized by Dunglison [in *op. cit.*] set forth as its general premise "'. . . that all diseases are the effect of one general cause and can be remedied by one general remedy.'" (See Blanton, *ibid.*, presumably quoting the *New guide*). This concept, by no means unknown to Science or Letters of the past, is admirably satirized by René LeSage's picaresque physician of *Gil Blas*, whose specific was warm water.

[4] I. e., October.

[5] Elsewhere correspondent has remarked: "The commonest malady in the United States is consumption. Try to study that part of Medicine. Anyone who finds a cure would probably make a colossal fortune out of it in short order. But I think this ailment is incurable."

[6] These "vegetables" would appear to be good, conservative Thomsonian standbys; Blanton (in *op. cit.*, p. 196) quotes an advertisement of one Peyton Johnson, druggist of Richmond, Virginia, of date 1846, as follows: "'Thomsonian Medicines including Nerve Powder, Lobelia, Golden Seal, Bay Berry, No. 6 [separate item, or Bay Berry No. 6?], Cholera Syrup, & all other herbs & medicine used in the practice. . .'" Torald Sollmann's *Manual of pharmacology* (see any edition copyright after 1917) states that the herb "*lobelia inflata* was used by the American Indians as a substitute for tobacco. It was introduced into

40 proof brandy, after which warm water is drunk until there has ensued the most extraordinary vomiting. Next, the patient rises and takes a second bath, like the first. He takes again to his bed, after having been laved with cold water and is surrounded with hot bricks and remains in bed for an hour. At the end of this time he takes two injections [enemas?] of penny royal, cayenne pepper and l'obelia [*sic*] and the treatment is over for the day.'

" Here is what Knappe adds:

' Perhaps you think that this horse-cure is weakening me. Not at all. It has given me strength and color. My complexion has cleared and I am no longer yellow, as I was. Yesterday I took the 11th treatment. That was worse than the others. I was given an injection of lobelia when I had the vomitive on my stomach. This made me so sick that for 3 hours I gave no sign of life. My children and the neighbors thought me dead.[7] At the end of that time I vomited forth more than 3 gallons [8] of bile, mingled with a sort of thick, heavy skin which would no end have astonished you. But here is the last straw of that cure. Sick as I was, they made me take my steam bath [!] [9] At 7 o'clock I arose and supped with terrible appetite

medicine by Samuel Thompson about the beginning of the 19th century as the main basis of his peculiar system of treatment." This drug, or poison, as it is often considered, remains a remedy of some repute among modern Eclectic practitioners, according to Dr. Harvey Wickes Felter, late of the medical faculty of the Eclectic Medical College of Cincinnati (see *Encyclopedia Americana*, XVIII [1934], 569 *ff.*), who notes that in actual practice ". . . the specific medicationist [i. e., Eclectic practitioner] is guided in the selection of his remedy by 'specific indications,' as illustrated by the following examples . . . [for] the full oppressed pulse with a sense of praecordial fulness and dyspnoea, lobelia. . . ." Dr. Felter acknowledges the contribution made by the Thomsonians who went over to the Eclectic school presumably at the disintegration of Thomsonianism; apparently the use of lobelia was propagated by these the former enemies of all medical Eclecticism, who ". . . creditably assisted in upbuilding it." (*Ibid.*)

[7] If we may assume that Knappe's letter has not been expurgated by correspondent, Knappe's objectivity and lack of personal comment seems both commendable and wonderful.

[8] No doubt it seemed that much.

[9] ". . . the reformer sought to substitute milder measures [i. e., for bleeding,

> and in the night an abscess burst internally and I gave up at least a pint [9a] of matter. For 3 or 4 days I had been feeling a severe pain to the right of my stomach. This keen pain is doubtless traceable to that abcess that yesterday's *treatment* caused to burst. Today at 3:00 P. M. I as still spitting up matter and blood, but the pains are over and I feel a great deal improved. My sleep is better, my blood circulates with greater ease. I feel stronger and have a ravenous appetite, and nonetheless, although a favorable change has been worked upon me, I do not believe that this treatment is to cure me. Albeit my doctor is certain of my cure. Time shall tell us the rest.'

"Such, my dear boy, is the new Thompsonian Medicine which has as you may well think many detractors and to give you proof thereof I cite from the New York Journal of Commerce of the 25th of this month—the item:

> 'The trial of Dr. Richard K. Frost on a charge of manslaughter, in causing the death of Tiberius G. French by the excessive use of lobelia and other improper treatment, under the Thompsonian practice; terminated on Saturday evening, when the jury, after about four hours deliberation found the prisoner guilty of manslaughter in the 4th degree. The trial commenced on the 13th instant.' [10]

"What surprises me somewhat is this manslaughter, this murder,

blistering, and the abuse of salts of mercury and antimony, and to employ vegetable medicines whenever possible. Yet, in the light of the present, the substituted practice of the early reformers would be regarded as but little less barbaric than that which they sought to supplement." (Felter, *op. cit.*, 569)

[9a] The old Fr. *pinte*, now obsolete equalled an English quart and was double the present capacity of a pint.

[10] This news item is to be found in the *New York Journal of Commerce* for December 25, 1837, p. 2, column 1, as cited above.

There is not much doubt that this case is that cited by David Meredith Reese, M. D. (in *Humbugs of New York*, N. Y., 1838, p. 119), whose sweeping accusations against Thomsonianism are accompanied by the specific information that "At the present hour, one of this fraternity is in 'durance vile,' convicted by a jury of this city, on the charge of manslaughter, in a case so flagrant that it could not escape the notice of the law, though the victim had been snugly ensconced six feet below ground, for some days before the outrage became the subject of investigation."

this homicide in the fourth degree. I cannot very well imagine that particular verdict." [11]

* * * * *

" Farewell, dear son, I embrace you with all my heart.

Your ever-loving father,

P^re^ Cherbonnier

" Knappe eats about a hundred little peppers every day." [12]

Bel Air
May [13] 1838

* * * * *

" Philippe Knappe . . . who lives in Philadelphia and whom Thompsonian Medicine appears to have cured, gives . . . the same advice as I. I went to Philadelphia last month during the holidays and Knappe came [back?] with me and spent several days with us." [14]

[11] Unfortunately, correspondent does not indicate with any precision whether his indignation is excited by what he considers too mild a verdict; or whether he is outraged by the interference of the Law between physician and patient—one might say " ex-patient " in this instance. (Through mis-chance, this paragraph was overlooked and does not appear in Addendum I.—*Author's note.*)

Some 450-500 words are here omitted. Only in the final line of the letter is the treatment again mentioned.

[12] *Stet,* as postscript but without " P. S." or similar device.

[13] Although the top of sheet bearing salutation has been torn away, we may approximate the date of this second letter through references in the missive itself; the date of Easter Sunday of 1838 (April 15), and other pertinent matters, as being of mid-May.

[14] This is the last reference made to Knappe to be found in the correspondence I have examined. We may summarize as follows the tangible information therefrom:

Correspondent, a layman, allegedly visited Knappe during October of 1837, and any inference to be drawn from his remarks must be that Knappe was failing rapidly. Despaired of by legitimate practitioners, Knappe, obviously snatching at straws, followed the regimen of a Thomsonian and prior to November 1, 1837 had taken eleven separate treatments, and apparently benefitted by them. The last is according to his statement quoted by correspondent Cherbonnier.

In May of 1838 Knappe was, according to Cherbonnier in good health and apparently cured. The time elapsed is estimated at around seven months.

The medical diagnosis of this case, which is interesting for its typification of an era in American medical history, I shall leave for those qualified to make.

ADDENDUM I

Transcript of Original Manuscript

" Tu sauras que Mr. Knappe a été tellement malade, que les plus célèbres médecins de Philadelphie, après lui avoir fait prendre une infinité de remèdes on finit [*sic*] par l'abandonner. Il s'est alors adressé à un docteur de la médecine thompsonienne qui s'est engagé à le guérir. Eh bien, depuis qu'il suit le traitement prescrit par Thompson, Knappe est beaucoup mieux. Je fus le voir le 4 de ce mois et trouvai que sa situation était bien différente de celle où jé l'avais vu en 8bre dernier. Sa maladie était selon ses premiers médecins Consumption. Mais les uns disaient que cela venait des pulmons, les autres du foie. Ceux-ci de la rate, ceux-là de la gorge (throat consumption) etc. etc. Le fait est qu'il toussait beaucoup et crâchait [*crachait*] une espèce de matière épaisse. Voici maintenant le traitement qu'il a suivi et qu'il suit encore. Les premiers jours on lui a fait prendre plusieurs décoctions de serpolet ou thym sauvage (Penny Royal) avec du piment, après avoir ainsi préparé, il a *suivi le cours de médecine* que Knappe me décrit ainsi dans sa lettre du 1er novembre: ' Le cours de médecine thompsonienne est 1° un bain à vapeur de 30 minutes. Lorsque la sueur coule grosse comme le du droit [*sic*; read *aussi grosse que le doigt*], on lave le corps avec de l'eau froid[e] et le patient est ensuite mis au lit avec des briques chaudes pour ramener la chaleur. Puis on donne un fort vomitif composé de *bay berry*, de cayenne (piment rouge) et de lobélia qui ne souffre dans l'estomac rien d'impur et toutes ces plantes son [*sont*] infusées dans de l'eau de vie à la 4me preuve, après quoi l'on boit de l'eau chaud[e] jusqu'à ce que l'on ait vomi extraordinairement. Puis le malade se lève et prend un autre bain comme le premier. Il se recouche, après été [*sic*] lavé d'eau froid[e] on l'entoure de briques chaudes et reste une heure au lit. Au bout de ce temps il prend deux injections composées de penny royal, de cayenne pepper et de l'obelia [*sic*] et le traitement est fini pour la journée.'

" Voici ce que Knappe ajoute:

' Vous croirez peut-être que ce remède m'affaiblit. Point du tout. Il m'a donné des forces et des couleurs. Mon teint s'était éclairci et je ne suis plus jaune comme j'étais. Hier j'ai pris le 11me cours. Celui-là a été pire que les autres. On m'a donné une injection de l'obelia lorsque j'avais le vomitif dans l'estomac. Cela m'a rendu si malade que pendant 3 heures je n'ai donné aucun signe de vie. Mes enfants et les voisins m'ont crû [*cru*] mort. Au bout de ce temps j'ai vomi plus de 3 gallons de bile, mêlée d'une espèce de peau épaisse et lourde qui vous aurait beaucoup étonné. Mais voilà l'agrément de ce remède. C'est que tout malade que j'étais on m'a fait prendre mon bain à vapeur. A 7 heures je me suis levé et j'ai soupé d'un appetit terrible et dans la nuit un abcès a crevè dans l'intérieur et j'ai rendu au moin[s] un[e] pinte

de matière. Depuis 3 ou 4 jours j'éprouvais une grande douleur du côté droit de l'estomac. Cette douleur vive provenait sans doute de cet abcès que le *cours de médecine* de hier a fait crever. Aujourd'hui [à] 3 heures de l'après-midi je crache encore de la matière et du sang, mais les douleurs sont passées et je me sens beaucoup mieux. Mon sommeil est meilleur, mon sang circule plus aisément. Je me sens plus fort et j'ai un appétit dévorant et cependant quoiqu'il soit fait en moi en changement favorable je ne crois pas que ce reméde [*sic*] me guérisse. Toutefois mon docteur est certain de ma guérison. Le temps nous apprendra le reste.'

" Telle est mon cher fils, la nouvelle médecine Thompsonienne qui a comme tu le penses bien beaucoup de détracteurs et pour t'en donner une preuve j'extrais du Journal de Commerce de New York du 25 de ce mois—l'article:

* * *

(See English text of transcript)

" Adieu, mon cher fils, je t'embrasse de tout mon cœur.

Ton bon père pour toujours,

P^re^ Cherbonnier

" Knappe mange une centaine de petits piments par jour."

Bel Air
May—1838

" Philippe Knappe . . . qui demeure à Philadelphie et que la Médecine Thomposonienne [*sic*] paraît avoir guéri . . . donne le même conseil que moi. J'ai été à Philadelphie le mois dernier dans les vacances et Knappe est [*re?*] venu avec moi et a passé quelques jours avec nous."

ADDENDUM II

" Associated with a system called the Thomsonian and as having implicit faith in a steam and in lobelia as curative agents Thomson [i. e., Samuel Thomson, 1769-1843] should not by any means be deemed a quack if the term means a vain and tricky practitioner, for he told all he knew in as plain a manner as possible and acquired much knowledge of hitherto unknown virtues of plants. He experimented on himself, then published the results, leaving others to form their own opinions. . . .

" When sixteen he offered himself as a pupil to a ' root doctor,' one Fuller of Westmoreland [New Hampsire], but . . . was refused. . . . He became a traveling doctor riding on horseback through New Hampshire, Maine, Vermont, and Massachusetts, first patenting his remedies at Washington. He finally settled down to practise in Beverly, Massachusetts, and naturally met with opposition among the faculty though he also made converts to his

system who, as he did, used lobelia emetics, sweating, capsicum, composition powder and hot drops. The author was once in jail on a charge of murder by lobelia poisoning but was acquitted and afterwards opened an office and infirmary in Boston. For twenty years the Thomsonian System flourished in New England, such men as Benjamin Waterhouse and Samuel L. Mitchill, in their private correspondence approving with reservations of the System and unreservedly of the author's frankness and zeal.

"Thomson passed from life on October 4, 1843, heroically partaking of his own remedies to the very end.

"His 'New Guide to Health' . . . became 'Thomson's Materia Medica or Botanic Family Physician,' which reached a thirteenth edition. . . . Two journals were started, 'The Botanic Watchman,' in 1834, and the 'Thomsonian Recorder,' 1833, which furnish curious and amusing reading."[15]

[15] Davina Waterford in *Cyclopedia of American Medical Biography*, II (1912), 445-446.

NOTES AND COMMENTS

THE WORD "BOMBASTIC"

HENRY E. SIGERIST

The 400th anniversary of the death of Paracelsus has been celebrated in many countries. Now that the anniversary year is drawing to a close, it seems opportune to emphasize that the word *bombastic* has nothing to do with Paracelsus. Paracelsus' family name was *Bombast von Hohenheim*. Since his style is rather involved and his writings present serious difficulties of interpretation, many people assumed that the word *bombastic* was derived from the proper name *Bombast* and was used to designate a peculiar style similar to that of Paracelsus. This is not correct, and I would like to refer the reader to the *Oxford Dictionary* which gives the complete history of the word. It is briefly as follows:

The Greeks called the silkworm βόμβυξ (bombyx) and the word came to designate also the product of the silkworm, silk or a silk garment. The Romans took the word over from the Greeks. A late Latin corruption of bombyx, namely *bombax* became a popular name for cotton in the Middle Ages. Cotton fabrics were imported from India from the time of the Asiatic wars, that is from the beginning of the 2nd century B. C., and in still larger quantities after the Parthian peace secured by Augustus.

Bombax became *bombace* in old French from the accusative singular *bombace-m*. It designated cotton and cotton wadding. The word bombace or in a different spelling, *bombase,* was taken over by the English.

Cotton was introduced into Western Europe on a larger scale from the 13th century on by the Arabs, from Spain and Sicily. With the Arabic product a new name came into our language, the one we are using today, namely, *cotton* which is of Arabic origin. قطن (*qutun*) became *coton* in old Spanish, and from Spain the word went to England by way of France.

Bombast is a variant of bombace or bombase, "the t being either simply phonetic or perhaps influenced by the past participle bombast

of the verb bombase," according to the Oxford Dictionary. The word bombast was used in the 16th century to designate the " soft down of the cotton plant, raw cotton, cotton-wool " but then also " cotton-wool used as padding or stuffing for clothes."

When a person wears padded or stuffed clothes, he pretends to have a physique which he actually does not possess. He inflates himself, so to say, and makes himself look more important than he is. Hence, bombast, the material used for the padding and stuffing of clothes, acquired the metaphorical meaning of " inflated or turgid language, high sounding language on a trivial and commonplace subject." In very much the same way we still call a pompous individual a " stuffed shirt."

The earliest reference to the metaphorical use of the word given by the Oxford Dictionary is Nashe's address prefixed to Robert Greene's *Menaphon* of 1589 where he writes of " the swelling bumbast of a bragging blank verse." Bumbast was a frequently found variant of bombast.

There is no evidence of any kind for a connection between the word bombast and the family name of Paracelsus. Until 1589 only very few of his writings had been translated into English.[1] They were mostly chemical or pharmacological treatises, the least " bombastic " and most factual of all his works. The German words *Bombast* and *bombastisch* were taken over from the English language and used in the same sense as in England.[2]

Bombyx designated in antiquity the silkworm and silk. Bombax was a mediaeval Latin word for cotton. Today bombax is the generic name for a group of trees the seeds of which are covered by a down that is similar to cotton wool. It is known as *kapok*—from the Malay word kapog—and is used for the stuffing of cushions.

[1] Karl Sudhoff's *Bibliographia Paracelsica* (Berlin 1894) mentions only three English translations before 1589: Nos. 168, 169, 184.

[2] See Daniel Sanders, *Wörterbuch der deutschen Sprache*, Leipzig, 1860.—Fr. L. K. Weigand, *Deutsches Wörterbuch*, Giessen, 1878.—Jacob and Wilhelm Grimm (*Deutsches Wörterbuch*, Leipzig, 1860) were obviously wrong when they stated that the English word bombast was derived from Latin *bombus*, the humming of bees.

THE AMERICAN INSTITUTE OF THE HISTORY OF PHARMACY

GEORGE URDANG

On January 22, 1941 six men founded in the classroom for pharmacognosy of the School of Pharmacy of the University of Wisconsin the American Institute of the History of Pharmacy. These men were: 1. The Director of the School, Dr. Arthur H. Uhl, whose vivid interest initiated the foundation; 2. The Director Emeritus, Dr. Edward Kremers, the great American pharmaceutical scientist and historian who in more than fifty years of indefatigable work created the fundamentals to build upon; 3. and 4. Dr. Louis W. Busse and Lloyd M. Parks, two younger members of the faculty representing the academic youth of American pharmacy; 5. The Secretary of the Wisconsin Pharmaceutical Association, Mr. Jennings Murphy, representing the pharmaceutical practitioners; 6. The former Director of the German Society of the History of Pharmacy and Editor of the *Pharmazeutische Zeitung*, Dr. George Urdang whose earlier work and European experience recommended him for the task given.

The Institute represents a combination of the stable institution commonly understood by this name, and an association. There is —until now—no fund guaranteeing its work and continuance. For the time being its existence and development depends entirely on membership fees and donations of individual groups or persons.

What are the tasks of the American Institute of the History of Pharmacy?— Why has it been founded at Madison, Wisconsin?

Up to the present time the general trend to organize and utilize historical research and knowledge, becoming obvious during the last decades in almost all sciences and professions, has not been realized in pharmacy.

There are societies of the history of pharmacy in France and in Germany. There is a University Department for the History of Pharmacy combined with a museum ("Schweizerische Sammlung

fuer das Apothekenwesen") at Basle (Switzerland) and there are many collections of pharmaceutical antiquities, among them those in the Wellcome Museum in London, in all countries of the civilized world. As to the United States of America the Division of Medicine and Public Health of the U. S. National Museum, the collections in the Boston, Minnesota, New York and Philadelphia Colleges of Pharmacy, and at Wisconsin, the "Ancient Pharmacy" of E. R. Squibb & Sons in New York and the Lloyds Library in Cincinnati have especially to be mentioned. The American Pharmaceutical Association has its section on historical pharmacy, gathering interested members of the profession at the meetings of the A. Ph. A., i. e. once a year since 1904. It has furnished a place for reports on pharmaceutico-historical work, not less but also not more.

What America, what the world lacks is a working center for all pharmaceutico-historical information and work. Such a center would have:

1. To aid in the collection, selection, arrangement and exhibition of pharmaceutico-historical material and—as far as possible—to catalogue and to inventory this material;
2. To give the research worker the possibility to discuss his projects, to get advice on literature and to publish the manuscripts concerned;
3. To furnish information and means for historical instruction at the Colleges of Pharmacy;
4. To furnish material for popular pharmaceutico-historical information directly to the general public (journals, newspapers etc.) or to individual pharmacists for use in their social and professional relations;
5. To co-operate with the historians of the related sciences and professions, especially of medicine in order to promote the mutual scientific, professional and social progress and understanding deriving from such a co-operation.

The reasons why the American Institute of the History of Pharmacy has been founded at Madison, Wisconsin have been set forth by the author of these lines in a memorandum, an abstract of which follows.

Why the American Institute of the History of Pharmacy Was Organized at Madison, Wisconsin

I. *Introductory Remarks*

It is but natural that the question will be asked and has to be answered why the American Institute of the History of Pharmacy, unique at least on American soil as it is, and universal in its work and objectives as it intends to be, has been organized at Madison, Wisconsin.

There are cities in this country more prominent in the general as well as in the pharmaceutical history of America than this rather small capital and educational center of one of the younger states of the North American Union. The reason that, nevertheless, Madison became the place of foundation and residence of the American Institute of the History of Pharmacy is very simple.

Madison is the only place within the Americas really ready for an institution like that.

It offers a unique collection of books, journals and other material of pharmaceutico-historical interest, the necessary general and pharmaceutical atmosphere, and finally the intellectual and substantial preparedness of the people concerned.

The foundation of an Institute of the History of Pharmacy at Madison is, therefore, not a matter of chance, but of destiny. It is the fulfillment of a long and consistent development. It is finally the crowning of the life work of a great man: Dr. Edward Kremers.

II. *The Libraries in Madison*

The total number of bound volumes contained in the libraries in Madison open to scientific or public use is about 1,100,000, and the number of pamphlets exceeds 400,000.

1. *The Pharmaceutical Section of the Library of the University of Wisconsin.*

The Pharmaceutical Section of the Library of the University of Wisconsin is a unique institution within the United States, especially as far as material pertaining to pharmaceutico-historical

knowledge and research is concerned. In this regard it is not second even to the Lloyd Library at Cincinnati, and not often equalled in Europe.

The following survey conveys an idea of its contents as far as historically important material is concerned:

The most important *books on drugs* which came down to us from Greek and Roman antiquity are represented by early prints or, sometimes even in addition, by annotated translations into different modern languages. The same holds true for the medieval and post-medieval literature concerned. The early chemico-therapeutical or *iatrochemical literature* (DuChesne or Quercetanus, Oswald Croll, Glauber, etc.) is represented to the same extent as are the books on herbs ("Kraeuterbuecher" and "Distillierbuecher") of the 16th and later centuries.

Among the literature pertaining to vegetable drugs and especially indigenous American drugs, the collection of different editions of the first scientific description devoted to them, viz. that of Monardes, deserves special attention.

Of special completeness is the collection of *pharmacopoeias, dispensatories and commentaries* and of the formularies preceding them from the Antidotaria Nicolai and the Grabadin of Pseudo-Mesue to the different official pharmacopoeias of the 16th, 17th, 18th and 19th centuries, and finally those being in force at the present all over the world. The different attempts at a Universal Pharmacopoeia can also be found in the Pharmaceutical Section of the Library of the University of Wisconsin.

It is almost self-evident but may nevertheless be mentioned that there is a complete set of the United States Pharmacopoeia and its American predecessors accompanied by the literature belonging to it.

The French, German, and English *reference- and textbook literature* from the 17th century to the present and, naturally, the respective American literature from its very beginning is excellently represented, whereby the literature on the economical and legal situation of pharmacy has found the same attention as that on the sciences, the technique, and the retail practice of pharmacy.

The collection of *pharmaceutical journals* contained in the Pharmaceutical Section of the Library of the University of Wisconsin

is one of the most complete to be found anywhere. The important French, German, English, Italian, Scandinavian, Dutch, etc. journals devoted to pharmacy are preserved in this library in complete or almost complete sets from their very beginning in the end of the 18th or early 19th centuries until the present or the discontinuation of their appearance.

It seems scarcely necessary to stress the fact that all important American pharmaceutical journals including those with primarily commercial tendency are represented in the library.

The *pharmaceutico-historical literature,* i. e., books and pamphlets on the historical development of pharmacy at large or in various countries or cities, in its special branches including manufacturing and wholesale, on prominent men and events, on special situations, institutions and problems, etc. has been stored on the shelves of the Pharmaceutical Section of the Library of the University of Wisconsin in a completeness which may be equalled only in a very few cases in some other part of the world.

As a special feature the collection of material concerning the rôle played by *the apothecary in fiction* as well as in the fine arts has to be mentioned.

It is impossible to describe the treasures of this library in full within the frame of a memorandum. Suffice it to summarize its real meaning and importance by the statement that from the very beginning of the establishment of the Pharmaceutical Section of the Library of the University of Wisconsin about half a century ago up to the present, pharmaceutico-historial knowledge has been its basis as well as one of its main objectives.

2. *The Libaries of the Humanities and the Non-Pharmaceutical Science Departments of the University of Wisconsin.*

The libraries of the University Departments of medicine, chemistry, botany, physics, zoology, biology, agriculture, engineering, etc. as well as those belonging to the humanities are unusually well equipped with reference books on the history of their special fields and other material of more or less immediate interest to pharmacy. Thus they offer a splendid supplement to the stock of the pharmaceutical library.

It conveys an idea of the importance of the books of the general (humanities) library to pharmaceutico-historical research if one realizes the fact that it contains Dioscorides in the Greek, Pliny in the Latin original and in translation, many of the works attributed to Hippocrates and written about him and the annotated and translated texts of the Papyri Ebers, Smith, etc. The entire bibliographic service of the country is made available through the office of the Director of the University Library.

3. *The Library of the State Historical Society of Wisconsin.*

The State Historical Society of Wisconsin, organized in the early part of 1849, i. e., scarcely one year after Wisconsin became a state, is exceptionally well equipped with printed and manuscript colonial records and government documents, state and federal, with United States newspapers, biographical material and reports concerning American travel, e. g., the Jesuit relations.

Within this frame, naturally, material of interest to the development of American pharmacy, the use and the cultivation of medicinal plants, etc. can be expected and has indeed been found and used.

4. *Other Libraries in Madison.*

There are furthermore in Madison the Library of the Wisconsin Academy of Sciences, Arts, and Letters, containing a valuable collection of reports and transactions of learned societies, the Legislative Reference Library, the State Law Library and finally the Madison Free Library. All these libraries have proved of occasional value to pharmaceutio-historical research.

III. *The Pharmaceutico-Historical Collection at Madison.*

1. *Collections Preserved Within the School of Pharmacy.*

The pharmaceutico-historical collections preserved within the School of Pharmacy of the University of Wisconsin may be divided into three groups:

a. Collections purchased or donated for the immediate purpose of instruction within the regular pharmacy course; b. The Collections of Dr. Kremers; c. The Collections of Dr. Richtmann.

a. *School Collections.* Besides the usual collections of chemicals and drugs to be found in most of the Schools or Colleges of Pharmacy, a collection of Ceylon and Johore drugs, especially illustrative of the natural history of Cinchona bark, and a collection of Malay, Philippine and Chinese drugs, are of special interest.

b. *Collections of Dr. Kremers.*

α. *Printed and manuscript material on the History of Pharmacy* with special regard to the history of American pharmacy.

Many files are filled with notes and material on the development of the individual associations, special meetings, and prominent officers. Others are devoted to the development of American pharmaceutical education and to the legal situation of American pharmacy. A special collection concerns manufacturing pharmacy and wholesale drug trade. The biological material brought together is especially comprehensive and unique.

β. *Slides.* There is a collection of slides, totalling over a 1000 and representing a unique selection of the pictorial material on pharmacy and chemistry available. The use of these slides is facilitated by a card catalogue as well as inventory.

γ. *Encyclopedic dictionary.* A collection of cards containing brief information or references on all possible subjects of pharmaceutical or related interest has been started with the intention of developing a pharmaceutical encylopedia. The respective files contain at present more than 150,000 cards.

c. *Collections of Dr. Richtmann.*

α. *Collections of literature on drugs* with special reference to those of American origin aimed at effecting an inventory of all data concerned. Among these collections one devoted to *botanical names* and a *bibliography of illustrations of medicinal plants,* separated into references to colored and black and white ones respectively, covering the field of plant-iconography has to be especially mentioned.

β. Material concerning the development leading to the modern *binominal nomenclature* in botany previous to, by, and subsequent to Linné.

γ. Material concerning the development leading to the modern *chemical symbols* previous to, by, and subsequent to Berzelius.

2. *Collections Preserved Within the Museum of the Wisconsin Historical Society.*

A Pioneer Wisconsin Drugstore was installed as a unit in the Museum of the Wisconsin Historical Society in the fall of 1918. Starting in 1897 the students and instructional staff of the School of Pharmacy with the cooperation, financial and otherwise, of the Wisconsin Pharmaceutical Association, collected material from all over the state. All of the objects, exhibited in the "store," had been used in Wisconsin pharmacies during the first 50 years of statehood (1848 to 1898). The arrangement of the material as a unit is largely the work of the Custodian of the Historical Museum, Charles E. Brown.

IV. *Pharmaceutico-Historical Instruction and Work at Madison, Wisconsin.*

1. *Pharmaceutico-historical Instruction.*

In the catalogue of the University of Wisconsin for 1897-98 we find two announcements concerning the historical treatment of subjects within the pharmaceutical curriculum.

It was in 1902 that on the initiative of Dr. Kremers steps were taken toward the organization of a Historical Section of the American Pharmaceutical Association by the appointment of a committee and it was at about the same time that he started in his home a kind of seminar on the history of pharmacy and chemistry.

In the University Catalogue 1907-1908 History of Pharmacy as well as History of Chemistry appear for the first time officially as recognized subjects of instruction both announced by the same teacher—the Director of the Course of Pharmacy, Dr. Edward Kremers. Since this time History of Pharmacy found a steadily growing interest and cultivation among the members of the staff of the Wisconsin University School of Pharmacy.

In the course of this development teachers and students advanced from the purely receptive stage of their work to that of research of their own.

2. *Pharmaceutico-Historical Work, Done and Planned at Madison.*

a. *Theses on historical subjects.* The interest and the cooperation of the students in historical information and work has been promoted at the School of Pharmacy of the University of Wisconsin by the fact that many of them were given pharmaceutico-historical topics for their theses. A great number of Bachelor's theses, some Master's theses, and even one Wisconsin University Doctor's thesis deal with historical or bibliographical problems or tasks.

b. *The Badger Pharmacist.* In 1900 the pharmacy students of the University of Wisconsin published under the title " The Badger Pharmacist " a volume of 292 pages as " a first attempt to bring together all important (historical) information pertaining to pharmacy in one State of the Union." Since 1931 the Badger Pharmacist has been continued as a journal issued in irregular intervals with the aid of the Eta (Wisconsin) Chapter of Rho Chi and occasional grants of the Wisconsin State Board of Pharmacy and Wisconsin pharmaceutical wholesalers and manufacturers.

Abandoning its self-imposed restriction to Wisconsin pharmaceutical history the Badger Pharmacist became the first and only periodical within the United States devoted exclusively to the History of Pharmacy, especially of American Pharmacy. The last four issues of the journal, the publication of which was made possible by grants-in-aid from the Hollister Pharmaceutical Library Fund of the State Historical Society of Wisconsin, were devoted by Dr. Kremers to the reproduction with comments of documents pertaining to the Medicinal Supplies within the North American Colonies from 1643 to 1790, namely: April, 1937: " Receipts to Cure Various Disorders " (1643), June, 1938: " The Lititz Pharmacopoeia " (1778), February, 1939: " A Drug List of King Philips War " (1676), December, 1940: " Coste's Compendium Pharmaceuticum " (1780).

c. *The Hollister Pharmaceutical Library Fund.* This fund was established in 1914 under the wills of the late Wisconsin pharmacist Albert Henry Hollister and his wife Kittie E. V. Hollister. Originally $12,205, it has grown to more than $35,000. Concerning the object of the fund or the Society administrating it, the late Dr.

Joseph Schafer, Superintendent of the State Historical Society of Wisconsin, wrote in 1926:

"The object of the Society is not to duplicate the valuable pharmaceutical collection of the University of Wisconsin, but to do for pharmaceutical Americana what the Society has been doing for Americana at large, and to do it in the same broad spirit."

The Hollister Pharmaceutical Library Fund, at Madison, administered by one of the leading American Historical Societies, is up to the present the only fund within the United States available for and until now devoted exclusively to the purpose of making possible pharmaceutico-historical publications.

α. *Facsimile reprint of the Pharmacopoeia Augustana.* The remark of Dr. Schafer quoted above is to be found in the preface to the first publication, paid out of the Hollister Fund of the Wisconsin Historical Society. A volume containing a facsimile reprint of the first edition of the Pharmacopoeia Augustana (1564), edited by Dr. Kremers. In his preface Dr. Schafer designates the reprint as "the first of the series of reproductions," with which "the State Historical Society hopes to impart a new stimulus to pharmaceutical historical research everywhere, making it possible to use photographically true copies of the originals."

β. *Planned publication of a facsimile reprint with comments of the first London Pharmacopoeia (1618).*

It was in consequence of the idea of a "series of reproductions" that in 1940 the writer of this memorandum was engaged for the purpose of investigating the real reasons for the hitherto insufficiently explained withdrawal of the first issue (May 1618) of the first London Pharmacopoeia and its replacement by another (December 1618) and to edit the planned facsimile reprint with his comments as an introduction. This investigation was finished within five months, i. e., from April 1 to August 31, 1940. The publication of the volume may be expected in the near future.

d. *The "Kremers-Urdang, History of Pharmacy."* There was until 1940 no systematic historical survey on the development of American pharmacy. It was on the initiative of Dr. Kremers and

in consequence of his plans that the author of this memorandum started in July 1939 with the preparation of an historical survey mirroring and explaining the growth of American pharmacy and the development during Antiquity and in Europe which it is based upon. This work, published in 1940, under the title "Kremers-Urdang, History of Pharmacy," would have been impossible without the abundant material available in Madison. Thus, as stated in the preface to the book, "Madison was, the natural birthplace of the history of American pharmacy."

e. *Slides.* The collection of slides previously mentioned shall be completed to a series illustrating every phase of the historical development of pharmacy as completely as possible. It is intended to reproduce the slides on film, and to place the film together with the legends concerned at the disposal of all interested individuals and institutions especially of teachers, Colleges of Pharmacy, and pharmaceutical associations at a non profit price.

f. *Encyclopedic dictionary.* In the last years the work on the encyclopedic dictionary previously mentioned has been done with the assistance of W. P. A. workers. It is being continued with the same cooperation.

V. *Conclusion.*

It is not the one or the other of the special features, events and publications mentioned above, but the fact of their coordinate and coordinating existence, the impact of their totality that makes Madison the only place within the Americas really ready for the establishment and the maintenance of an Institute of the History of Pharmacy.

However, it is not a "Madison" or a "Wisconsin," it is an "American" Institute which a few men have conceived and decided upon on January 22, 1941. The results of almost half a century's work, experience and growth are placed at the disposal of American pharmacy. Theoretically, it can take and use them or it can leave and lose them. Practically there is no alternative of that kind.

American pharmacy has proved to be professionally minded and aware of its cultural importance. Thus its response to a challenge like this is certain. It cannot be anything else but positive.

ANNOUNCEMENTS

AMERICAN ASSOCIATION OF THE HISTORY OF MEDICINE

From October 24 to 25, 1941 the Association held its *Semi-annual Meeting* in Kansas City under the auspices of the Quivira Medical History Club, with Dr. Logan Clendening as Chairman. The sessions took place in the beautiful rooms of the Department of Medical History of the University of Kansas, and no more congenial surroundings could have been found. The Department is a real treasure-house with rare old books, a working library and valuable collections.

It was in the Library that members of the Quivira Cub, of the Association, and delegates of the various groups met on the morning of October 24. Dr. William S. Middleton had come from Madison, Wisconsin, Dr. Howard Dittrick from Cleveland, Ohio, Dr. Bert F. Keltz from Oklahoma City, Dr. David A. Tucker, Jr. from Cincinnati, Ohio and the Secretary of the Association from Baltimore.

Dr. Clendening opened the first session at 9:30 a. m. in the very pleasant lecture hall of the department. The first speaker was Dr. M. W. Pickard of Kansas City who discussed and demonstrated a remarkable collection of Japanese netsuke of medical interest, the results of many years of collecting in Japan and all over the world. He was followed by Dr. Bert F. Keltz, President of the Osler Society of Medical History of Oklahoma City, who presented a brilliant paper on *Indian Medicine in the Southwest.* He also demonstrated a much appreciated color film made by Dr. Evelyn Smith which reconstructs a delivery as it is practised today among the Oklahoma Indians. The last presentation of the morning session was a discussion by Dr. George E. Walker of an *Exhibit of Early American Microscopes.*

After a luncheon at which the members of the meeting were the guests of the University of Kansas Hospitals, the afternoon session was opened with a most interesting paper presented by Dr. William S. Middleton on *Medicine at Valley Forge,* in which he pictured the medical history of the campaign. The paper has since been published in the *Annals of Medical History.* Dr. E. H. Skinner then demonstrated his collections of early American books on the X-ray, of book items of the Research Trail of the X-ray, and first volumes of X-ray journals of all countries. Dr. Skinner possesses a remarkable collection that enables us to visualize the prehistory and history of the X-ray step by step. The next paper brought us back to the Missouri Valley when Dr. Thomas B. Hall discussed *Doctor John Sappington and His Treatment of Fevers of the Missouri Valley.* Sappington was one of the first to apply quinine in the treatment of malaria in that region, and his remedy was extremely popular. The session was concluded by a thorough study by Dr. Parke H. Woodard of the Department of Physiology of the

University of Kansas on the *History of the Changing Ideas of the Nerve Impulse.*

From 5:30 to 7 o'clock the members of the meeting were the guests of Dr. and Mrs. Logan Clendening at their hospitable home. They had invited us to a tea, but I am not betraying a secret by revealing that tea was not the only drink served.

A banquet was then held at the Kansas City Club, and after the dinner Dr. Ralph H. Major took us to the Island of Cos which he had visited a few years ago. His address and his lantern slides reconstructed for us the island of Hippocrates, and we all hope that the book that he is preparing on the subject will be published soon.

The Saturday session was opened at 9:30 a. m. with a paper of Dr. Richard M. Burke of Clinton, Oklahoma on *Significant Dates in the History of Tuberculosis,* followed by a presentation and discussion of a collection of apothecary jars by Dr. William M. Mills of Topeka, Kansas. The meeting ended with a discussion of some difficult parts in the Latin text of Vesalius' *Fabrica.* Dr. W. P. Hotchkiss of the University of Kansas City who has been helping Dr. Clendening in translating the Introduction of the *Fabrica* pointed to a passage of the Introduction that presents great difficulties in interpretation.

On behalf of the American Association of the History of Medicine Dr. Sigerist expressed the gratitude of the Association and of all members present for the splendid organization of the meeting, the interesting papers and exhibits, and delightful hospitality extended to our group by Dr. Clendening and his colleagues. We are a small group but we know each other well, and whenever we meet we have a most inspiring time and go home with very pleasant memories.

H. E. S.

The *Eighteenth Annual Meeting* of the Association will be held in Atlantic City, N. J. on May 3-5, 1942. The program foresees 12 papers of 20 minutes time each to be presented at the morning sessions of May 4 and May 5. Members intending to present a paper are requested to announce it to Dr. J. H. Elliott, 11 Spadina Road, Toronto, Ontario, Canada as soon as possible.

CONSTITUENT SOCIETIES

The Johns Hopkins Institute of the History of Medicine.

The Third Graduate Week in Medical History will be held from April 27 to May 2, 1942, that is in the week preceding the Annual Meeting of the Association. The program will be announced in January.

The Johns Hopkins Medical History Club.

The first meeting of the year was held on November 3, 1941. The program consisted of four short papers:

1. Origin and Development of the Asclepius-Religion.
   Dr. Ludwig Edelstein
2. Tradition and Progress in the History of Epilepsy.
   Dr. Owsei Temkin
3. American Spas in Historical Perspective.
   Dr. Henry E. Sigerist
4. Program for the Medical History of the Emergency.
   Dr. Sanford V. Larkey

The following exhibits were displayed:

In the Exhibition Hall: Medical Autographs of the Henry Barton Jacobs Collection
In the Lobby: Highlights in the History of Biochemistry
In the Great Hall: Recent Gifts Presented to the Institute
Some New Acquisitions
Publications of the Institute

Officers elected for 1941-1942:

President: Dr. Alan C. Woods
Vice-President: Dr. George W. Corner
Secretary: Dr. Henry E. Sigerist
Delegate: Dr. Owsei Temkin

New York Society for Medical History.

The November Meeting was held in conjunction with The Section of Historical and Cultural Medicine at the New York Academy of Medicine Building on November 12. It was devoted to a Symposium on The Approaches to Medical History at which Dr. Richard H. Shryock, Dr. Iago Galdston, Dr. George Rosen, and Dr. Fritz Wittels spoke.

The December Meeting was held at the New York Academy of Medicine on December 12. The papers of the evening were:

1. Hippocratic Ethics in Modern Medicine, by Savas Nittis, M. D.
2. The History of Arsenic, by Paul E. Bechet, M. D.

College of Physicians of Philadelphia, Section on Medical History.

The Annual Students' Meeting was held on December 8, 1941 at 8:30 o'clock with the following program:

Historical Aspects of Neurosurgery: Dr. Robert A. Groff, Formerly Assistant Professor of Neurosurgery, Graduate School of Medicine, University of Pennsylvania.

The Development of Modern Urology: Dr. Stanford Mulholland, Associate Professor of Urology, Woman's Medical College of Pennsylvania (by invitation).

Some Contributions of American Surgery to the Art and Science of Medicine: Dr. I. S. Ravdin, Harrison Professor of Surgery, University of Pennsylvania.

NATIONAL NEWS

University of Maryland.

A series of eleven lectures on the History of Medicine is being given by Dr. Louis A. M. Krause. The general subject is *The History of Scourges.*

University of Pittsburgh, The School of Dentistry Anesthesia Collection.

From an article of Dr. T. F. McBride in *Pitt, a Quarterly of the University of Pittsburgh,* Autumn, 1941, p. 40 f.:

"Today the University's Dental Library and Museum, through the efforts of Dean H. E. Friesell and Dr. Harry Archer, head of the department of anesthesia and exodontia, is the repository for the most outstanding collection of literature on anesthesia, both historical and modern, and contains the most extensive array of historical anesthetic equipment in this country. Naturally, much of the collection is concerned with the life of Horace Wells, the Hartford, Connecticut, dentist, who 'first discovered, demonstrated, and proclaimed the blessings of surgical anesthesia.' Indeed, the collection of Wellsiana here at Pittsburgh probably is the most complete now in existence, consisting as it does of the personal letters and effects, original writings, miniatures, and portraits, and incidental items relative to Wells' life and his travels abroad. . . .

"Last year, on December 10, the ninty-sixth anniversary of Wells' discovery, the Dental Alumni Association, in the first event to announce publicly the collection on anesthesia, presented an oil portrait of Horace Wells to Dean Friesell. Dr. Friesell, for 44 years, has been an avid collector of documents and apparatus on the history of anesthesia. His interest stems in part from the time he was a dental student and met and talked with Gardner Q. Colton. The Dental Alumni Association desired to give tangible evidence of its appreciation of this work of Dr. Friesell in amassing the collection and making it available to the members of the Association. . . .

"Also announced at that time was the collection in the Museum of the most extensive grouping together of local and general anesthesia apparatus in existence. A series of hypodermic syringes ranges from one of the earliest, dated 1847, to the latest, of synthetic resin. The general anesthesia display contains gas generators and inhalers, from 1856 to the present.

"This year, June 10, at the annual dinner of the Dental Alumni Association, Dr. Archer presiding, was the culmination of the year's activities: the

unveiling of the portraits of five pioneers of anesthesia. These portraits were presented to the Dean by the Alumni representative of several Dental fraternities, Alpha Omega, Delta Sigma Delta, Omicron Kappa Upsilon, and Psi Omega, and an officer of the International Anesthesia Research Society.

"The portrait of Sir James Y. Simpson was presented by T. F. McBride, president of Psi Omega Alumni chapter. Simpson was the Scotch physician who was first to use chloroform in anesthesia.

"James M. West, representing the auxiliary chapter of Delta Sigma Delta, unveiled the portrait of William T. G. Morton, who first successfully demonstrated the use of ether anesthesia for tooth extraction, and later for general surgery.

"Gardner Q. Colton's portrait was presented by the Alpha Omega Alumni, represented by Max Silverman. It was Colton who gave the lecture on chemistry and the demonstration of 'laughing gas' during which Wells conceived its use as an anesthetic agent.

"Beta chapter of Omicron Kappa Upsilon, national honorary dental scholastic society, represented by Dr. A. C. Young, presented the portrait of Henry H. Hickman, who was the first to experiment with inhalation anesthesia on animals.

"George J. Thomas of the Medical School faculty, and vice president of the International Anesthesia Research Society, presented the portrait of John Snow, first physician to specialize in the administration of anesthetics. . . .

"Then, on behalf of the Odontological Society, Dr. J. S. Oartel unveiled an oil painting of Dean H. Edmund Friesell. The painting was accepted for the School by Dr. John S. Ashbrook, a representative of the faculty, with the instruction 'to hang it in the place of highest honor in the School's Hall of Fame.'"

Medical Museum of the Rochester Academy of Medicine, Rochester, N. Y.

The medical museum of the Rochester Academy of Medicine was organized as a division of the Rochester Museum of Arts and Sciences in 1936 when the Academy was at its former location on Prince Street. With the acquisition of the Lyon home and the building of the new auditorium, more adequate space was afforded for a museum. The assistance of the New York State Federal Arts Project has made it possible to decorate and re-equip the museum. A noteworthy feature is a memorial frieze in which is recognized the fundamental contributions made to medical science by twenty-four North American physicians in the past one hundred fifty years. Another decorative feature is a mural in which is portrayed the contributions of medicine to modern civilization. The physicians honored in the frieze are: Benjamin Rush, William Beaumont, Crawford W. Long, William T. G. Morton, Oliver Wendell Holmes, Ephraim McDowell, S. Weir Mitchell, Edward L. Trudeau, Theobald Smith, Howard T. Ricketts, Hans Zinsser, Harvey Cushing, Lafayette B. Mendel, Elmer V. McCollum, William C. Gorgas, Walter

Reed, Abraham Jacobi, William Osler, Walter B. Cannon, James B. Herrick, Frederick G. Banting, Charles H. Best, George H. Whipple, and George R. Minot.

The Museum was dedicated on November 16, 1941 with the following program.

3 p. m.	Reception to distinguished guests.	
4 p. m.	Presiding.....	Dr. W. J. Merle Scott, *President Rochester Academy of Medicine.*
	Purpose of Museum...	Dr. John R. Williams, *Chairman of Museum Commission.*
	Introductory Remarks.	Dr. George H. Whipple, *University of Rochester*
	Address.....	Dr. Walter B. Cannon *George Higginson Professor of Physiology, Harvard Medical School.*
	Inspection of Museum.	
6:45 p. m.	Dinner at University Club.	

Edward Kremers.

From a statement of the American Institute of the History of Pharmacy at Madison, Wis.:

"On July 9, 1941, Dr. Edward Kremers, Director Emeritus of the School of Pharmacy of the University of Wisconsin, died of a heart attack after having undergone some operations (intestinal cancer) with good success. He was 76 years of age.

"Kremers liked, if not even loved history, and it was this love that made him an ardent fighter for the teaching of the history of pharmacy in particular as well as of science in general as a means of humanizing the technical sciences and professions and those practising them. It was Kremers who initiated the organization of a Historical Section of the A.Ph.A., founded in 1902, and created in that way an organized pharmaceutico-historical movement on American soil. It is likewise very probable that the courses in the history of pharmacy as well as of chemistry, announced by Kremers for the first time in the 1907-1908 catalogue of the University of Wisconsin, were the first of their kind to be held as recognized subjects of instruction at an American university or college. The teacher of the history of pharmacy became of necessity a collector of historical material. In fifty years of collecting Kremers brought together books, pamphlets, illustrations, clippings, notes, etc. of historico-pharmaceutical meaning touching every possible aspect of pharmacy.

"The American Institute of the History of Pharmacy, founded in 1941 on

the initiative of Dr. A. H. Uhl in the spirit of Kremers and as an attempt to perpetuate the work and the ideals of this pioneer of the history of pharmacy, made him its Honorary President on its first initiating meeting."

NEWS FROM LATIN AMERICA

Peru.

The first fascicle of the 1941 volume of *Anales de la Sociedad Peruana de Historia de la Medicina* has just been received. It contains the following contributions:

Un nuevo año de labores.
La Sociedad Peruana de Historia de la Medicina en el año 1940. Discurso del Presidente de la Sociedad, Dr. C. E. Paz Soldán, en la sesión inaugural de sus trabajos de 13 de Mayo de 1941.
Tafur y la Vacuna, por el Dr. Juan B. Lastres.
El homenaje a la memoria de Francisco Pizarro. Palabras del Presidente de la Sociedad, Dr. C. E. Paz Soldán.
El asesinato del Conquistador del Perú D. Francisco Pizarro. Estudio Médico-Legal, por el Dr. Guillermo Fernández Dávila.
Noticias y Comentarios: El Perú, por el Prof. Henry E. Sigerist (Traducción).
Una distinción al Dr. Juan B. Lastres.
Croquis del Palacio de Pizarro (grabado).

CORRECTIONS

Remarks to "Bulletin of the History of Medicine" Vol. IX, No. 5, May 1941.

In the articles published in "Bulletin of the History of Medicine," Vol. IX, No. 5, May 1941, I found two statements which I think deserve some discussion.

I. Harry Friedenwald: The Medical Pioneers in the East Indies.

In telling of the Latin epitome which Carolus Clusius (Charles L'Ecluse) published of the Portuguese original of Garcia de Orta's Coloquios, Friedenwald writes on page 499:

> "An Italian translation by Monardes from the Latin of Clusius was published in Venice in 1575 and other editions appeared in 1582, 1589, 1597, 1616. Orta (Garzia da) Dell' Historia de i Semplici Aromati, et altre cose che vengono portate dall'Indie Orientali pertinenti all' uso della Medicina, con Annotationi di C. Clusio. Parte Prima, diuisa in quattro Libri. Et due altri libri parimente di quelle cose che si portano dall'India Occidentali. Di Nic. Monardes."

The title of the presumed "Italian translation by Monardes from the Latin of Clusius" quoted by Friedenwald only tells that the book contains Clusius' epitome of da Orta's Historia dei Semplici Aromatici and furthermore two other books written by Nic. Monardes. There is nothing in this title giving evidence of an Italian translation made by Monardes "from the Latin of Clusius'" epitome of the book of Garcia da Orta.

In fact such a translation has never existed. It is the Italian translation prepared by Annibale Briganti and first published in Venice in 1576, combining in one volume Clusius' epitome of da Orta's Coloquios and Monardes' De las cosas que se traen de muestras Indias Occidentales . . . , of which the issues of 1582, 1589, 1597 and 1616 mentioned by Friedenwald were later editions.

II. Herman Hausheer: Icarian Medicine.

On page 522 the author writes:

> "During the first quarter of the nineteenth century French chemists discovered a number of valuable drugs. M. Seguin announced in 1804 that he had isolated morphine from opium. A dozen years later, Sertuerner of Hanover gave it its present name, described its properties and made it well known."

Although not directly wrong this statement cannot be considered as giving the right idea of the merits of the men mentioned.

There are three men who at about the same time found in opium a "matière végéto-animale toute particulière" (a quite peculiar vegetable-animal matter) as Séguin puts it: the French pharmacist Charles Louis Derosne (1780-1846), the French banker and amateur chemist Armand Séguin (1765-1835) and the German pharmacist Friedrich Wilhelm Sertuerner (1783-1841).

Séguin deposited the results of his investigation with the French Academy of Science in December 1804. It was not before December 1814 that the Annales de Chimie published his statements. Séguin indeed had found the meconic acid and a crystalline substance which was certainly identical with the "morphium" of Sertuerner. Neither has Séguin proved this "matière végéto-animale toute particulière" to be the somniferous principle of opium nor has he recognized the nature and the importance of its basicity.

Derosne prepared and sold already in 1803 under the name "sel de Derosne" a salt, obtained by treating an alcoholic extract of opium with alkali. This salt represented according to an analysis made later on by Robiquet a mixture of narcotine and morphine. Like Séguin Derosne has not proved his "sel" to be the somniferous principle of opium and has not recognized the nature and the importance of its basicity. He attributed the basicity of his "sel" to impurities, due to the process of preparation.

Sertuerner started his investigations of opium in 1803. In 1805 Tromms-

dorff published in his "Journal der Pharmacie" (*13*: 227, 1805) two letters of "Friedrich Sertuerner in Paderborn"—at that time Sertuerner worked as a clerk in Cramer's eagle-pharmacy at Paderborn—reporting the discovery of meconic acid. Early in 1806 the same journal (*14*: 47, 1806) brought the classical publication in which not only the new crystalline substance found was described by Sertuerner but its principal qualities definitely stated. On the basis of experiments with dogs and mice Sertuerner proved the new substance to be the "principium somniferum" of opium. Furthermore he pointed out that its basicity is a characteristic quality of it and that Derosne was wrong in attributing it to impurities. Thus Sertuerner described the qualities of morphine already in 1806. It is true that the name morphium was coined by him "a dozen years later" and that it was this later publication appearing in Gilbert's Annalen der Physik (*55*: 56, 1817) under the title "Ueber das Morphium, eine neue salzfaehige Grundlage, und die Mekonsaeure, als Hauptbestandteile des Opiums" (About the two main constituents of opium, the new saltforming base morphium, and meconic acid) which made the discovery of morphine well known.

As to the priority of the discovery of morphine, all depends upon the question whether we recognize the mere finding of the substance concerned as the criterion or whether we ask for the determination of its most important characteristics by the finder in order to consider him the real discoverer.

Although the work of Derosne and of Séguin was surely known to them, two of the greatest French scientists of the first third of the 19th century, the chemist Gay-Lussac and the naturalist Cuvier, found the determination of the characteristics of morphine the really important matter. On the initiative of Gay-Lussac, Robiquet prepared a French translation of Sertuerner's last mentioned essay (1817) and in the preface with which Gay-Lussac introduced the publication (Annales de Chimie *5*: 121, 1817) he referred to the first essay of Sertuerner on the principium somniferum of opium (1806) as follows: "Nous sommes surpris, que le premier memoire de Mr. Sertuerner n'ait pas fixé plus tôt l'attention des chimistes." At the same place Gay-Lussac called the discovery made by Sertuerner "cette découverte extrêmement importante."

In 1831 the Institut de France, known as especially sensitive as far as national questions were concerned, recognized the merit of the German Sertuerner by awarding him the Monthyon-prize of frcs. 2000. In the letter announcing the award Cuvier stated that Sertuerner got it "pour avoir reconnu la nature alcaline de la morphine, et avoir ainsi ouvert une voie, qui a produit de grandes découvertes médicales."

This statement makes it definitely clear, that it was the work of Sertuerner and not of Séguin or Derosne which, in the opinion of the Institut de France expressed by Cuvier, laid the ground to the discovery and correct evaluation of alkaloids, including "the discoveries of Pelletier and Caventou (not

Carenton) of strychnine in 1818, brucine in 1819, and quinine in 1820," mentioned by Herman Hausheer.

GEORGE URDANG,
Director of the American Institute of the History of Pharmacy.

Madison, Wisconsin.

Supplements to the Bulletin of the History of Medicine.

In October 1941 all members of the American Association of the History of Medicine and other subscribers to the Bulletin received a reprint of the editor's article outlining a project of Supplements to the Bulletin (1941, Vol. X, pp. 1-4). At the same time they were asked whether they would be willing to subscribe to such a series in case it could be launched. It was explained that the series could not be considered unless 300 subscribers could be secured.

So far, only 160 individuals and institutions have expressed their willingness to subscribe to Supplements. We shall wait four more weeks. If the number of potential subscribers has not increased substantially by that time, the plan will be dropped with the consequence that in the future the Bulletin will not accept any manuscript of more than 7500 words or 25 type-written pages, double-spaced.

H. E. S.

INDEX OF NAMES—VOLUME X*

Abbott, *Sir* John, 305
Abbott, Maude E., 115, 305-308, 353, 362.
Abbott, William Osler, 71, 79
Abbott, *Mrs.* William Osler, 71
Abell, Irwin, 329
Abercromby, David, 236
Acland, 608
Acland, T. D., 556
Actuarius, Johannes, 222
Adami, 305, 551
Adams, Francis, 222, 544
Aegidius, 222
Aegimius, 210, 221
Aelian, 542
Aesculapius (*see* Asclepius)
Aetius of Amida, 149
Agartharchides, 538, 539
Agassiz, Louis, 252
Agathinus, 219
Agnew, David Hayes, 66
Agrippa, 44
Ahern, 307
Ahumada, Juan Carlos, 109
Albegnefit, 524
Albertini, 137
Albertson, William C., 79
Albertus Magnus, 46, 49
Alcalde, Fernandez de, 352
Alcmaeon of Croton, 107, 199
Alexander the Great, 41, 45
Alexander Philatheus, 218
Allbutt, T. C., 547, 549, 561, 565
Allen, R. G., 326
Allendy, 262
Allport, G. W., 667, 670
Alpinus, Prosper, 219
Amberg, Jerome von, 617, 622
Amenophis IV, 108
Amira, von, 610
Amman, P., 584
Amusgo, Melchos de, 575
Ana de Osorio (*see* Chinchon, *Countess* of)
Anburey, Thomas, 181, 190
Andel, M. A. van, 632
Andral, 515
Andriolli, 419
Anglicus, Gilbert, 155, 163, 166
Anthony, F. W., 257
Antigonus, *King*, 35
Antiochus, 34, 211-214
Antrim, Walter, 58
Apollo, 128
Apollonius, 33, 550
Apollonius Mys, 200
Pseudo-Apuleius, 44
Aquilanius, Sebastian, 164
Archer, Harry, 704
Archer, John, 514
Archibald, 178
Archigenes, 200, 217-219, 221
Aretaeus, 201
Aristotle, 46, 199, 291, 514, 523, 525, 526, 539-541
Aristoxenus, 218
Arnald of Villanova, 161, 166, 382
Arnold, 70
Arrot, 420
Aschner, Bernard, 260-271, 333
Asclepiades, 219, 290, 295, 296
Asclepius, 221, 703
Ashbrook, John S., 705
Ashhurst, John, 66
Astruc, Jean, 165, 166
Athenaeus, 219
Atkinson, James, 550
Atkinson, S. B., 558
Atticus, Julius, 291
Aubert, Antoine, 639, 640, 643, 646
Auenbrugger, Leopold, 143, 147
Augustus, 44, 163
Austin, Anne L., 106, 334

* Names occurring only in footnotes and bibliographies have not been included.

Autenrieth, 268
Avicenna, 215, 222-224, 230, 240, 345

Baas, Joh. Hermann, 223
Babey, 561
Baccheius, 218
Bach, 48
Bachmann (*see* Rivinus, Augustus Quirinus)
Bacon, *Sir* Francis, 546
Bado, Sebastiano, 417, 421, 448-453, 459, 568-570, 578, 579, 581-583, 585, 591-592
Badus, Hieronymus, 446, 448, 451, 452
Bagehot, Walter, 10
Baillie, 522
Baker, C. R., 115, 362
Balmis, Francisco Javier, 108, 110
Bangolea, Adrián J., 109
Banks, William, 279
Banov, Leon, 331
Banting, *Sir* Frederick, 327, 706
Bárány, Robert, 208
Barba, P., 583
Barker, Creighton, 631
Barranca, 425
Barreda, Michael de, 580, 581
Barreiro, R. P. A. J., 589
Barrio, Avelino, 109
Bartholinus, Thomas, 198, 203
Bartoli, Daniele, 204
Barwick, John Freeman, 326
Bass, Elizabeth, 315
Bassett, J. Y., 465
Bassett, John V., 515
Bassini, 109
Batson, W. P., 326
Battel, Andrew, 534, 543
Baumgartner, Leona, 333
Baxter, Samuel S., 58
Bay, J. Christian, 342
Bayne, Helen, 333
Bazán, Fernando Coni, 109
Beaman, A. G., 309-313
Beaumont, William, 98, 100, 107, 327, 331, 630, 705
Bechet, Paul E., 626-630, 703
Beddoe, Harold Leroy, 326
Behaim, Friedrich, 623
Behaim, Magdalena, 617, 621, 623
Behaim, Margaret, 614, 615
Behaim, Paul, 614-624
Belga, Michael, 583-586
Bell, A. N., 485
Bell, Benjamin, 155
Bell, *Sir* Charles, 106, 321
Bell, John, 106, 515
Bello, Eduardo, 111
Beltrán, Juan Ramón, 107, 108, 415
Benassi, 138
Bennett, 664
Bennett, E. T., 541
Bentham, Jeremy, 12
Berengario da Carpi, Jacopo, 201
Beristayn, Jorge, 110
Bernard, Claude, 409, 520
Bernhart, 618
Bernheim, Bertram M., 330
Berzelius, 697
Best, Charles H., 706
Bethea, Oscar W., 326
Bichat, 518, 522
Bidez, Joseph, 378
Bienfang, Ralph E., 625, 626
Bier, 262
Bigelow, Jacob, 251
Billings, J. S., 514
Billroth, Theodor, 123, 125-127, 144
Blakeney, J. R., 322
Blanc, Louis, 12, 13
Blanche, Antoine-Louis, 648
Bland-Sutton, John, 563
Blane, *Sir* Gilbert, 55
Blanton, Wyndham B., 361
Blegny, Nicolas de, 451, 583
Blogg, Minnie, 307
Blondus, Michael Angelus, 161
Boas, Ernst P., 332
Bobbs, John Stough, 327
Boccaccio, 214, 224-226
Bochart, S., 542
Boeck, 154
Boerhaave, Herman, 110, 123-125, 246, 548, 553-555, 559
Bohn, Johann, 204

Boivin, *Madame*, 514
Bolduan, Charles F., 333
Bollus, Antonius, 451-453, 568, 578, 583
Bombaugh, C. C., 515
Bonaparte, Lucien, 641
Bonet, Théophile, 204
Bonfilio, N., 323
Bonnechose, de, 189
Bonnet, 112
Bonpland, 420
Booker, 514
Bordeu, Théophile de, 239, 240, 247
Borodin, 134
Bossu, 192
Botallus, Leonardus, 164
Bouillaud, 140
Boulanger-Dausse, E., 352
Boulogne, Duchenne de, 207
Bourgeois, Louyse, 514
Bovell, James, 76
Bowdich, T. E., 534
Bowditch, Henry, 259
Bower, John L., 65, 96-98
Bowers, Roy A., 625
Boyd, Esther, 333
Boyd, Linn J., 333
Boyle, Robert, 48, 521
Boyleston, 657
Boylston, Zabdiel, 251, 519
Boym, Michael, 233, 235, 243
Bradford, *Dean*, 259
Bradley, William N., 60, 61
Brady, 104
Brahms, Johannes, 123, 125-127
Brand, 163
Bressany, 183
Brettonneau, 342
Brickell, D. Warren, 462, 466
Briganti, Annibale, 708
Broc, 545
Brodie, *Sir* Benjamin Collins, 106, 329
Broke, *Captain*, 55
Bromberg, Walter, 332
Brooks, W. K., 516
Broussais, 9, 515
Brown, Carleton, 505
Brown, Charles E., 697
Brown, Gustavus, 516
Browne, *Sir* Thomas, 82, 546, 548, 552
Browning, Robert, 227
Brunacio, G., 417, 443-445, 448, 583
Buchan, John, 147
Buck, Robert W., 321
Budd, William, 482
Budge, Wallis, 224
Bueno, Cosme, 111, 425
Buhl, 500
Bulkley, Henry D., 628
Bulkley, L. Duncan, 628
Burchtorff, 611
Burke, Richard M., 521, 702
Burns, Allan, 136, 138, 139, 142
Burr, Charles W., 61, 65, 103
Burton, Robert, 214, 215
Burton, William, 124
Busquet, Paul, 554
Busse, Louis W, 690
Butler, *Admiral* Charles S., 167
Butler, Richard, 326
Butlin, *Sir* Henry, 562

Cabrera, Alonso de, 109
Cabrera y Bobadilla, Don Luis Geronimo Fernandez (*see* Chinchon, *Count* of)
Cagliostro, 49
Cain, J. C., 660
Caire, Arthur, 326
Calancha, Antonio de la, 440, 442, 569, 586, 587
Camac, Charles Nicoll Bancker, 115, 309-313, 362, 548
Camac, Ellen McIlvaine, 309
Camac, Eva, 312
Camac, Harriet, 310
Camac, William, 309
Camerarius, Joachim, 616
Campbell, L. B., 17, 21
Campbell, Sarah Elizabeth, 315
Cannon, Antoinette, 333
Cannon, Walter B., 706
Cantor, Max M., 356
Capparoni, Pietro, 352

Cárcano, Celes, 109
Cardano, 370
Carenton, 710
Carmichael, Leonard, 321
Carpenter, William M., 467, 468
Carrillo, 110
Cartwright, Samuel, 462
Carver, Jonathan, 188
Cary, M., 531
Casserio, Giulio, 202
Cassius, 288, 289, 290
Castelli, Petrus, 443, 446-448, 459
Castiglioni, Arturo, 223, 262, 344, 345, 390, 395, 630
Castle, 80
Cataneus, Jacob, 164
Catlin, George, 183, 185, 187, 191
Cave, 632
Caventou, 709
Cawadias, 262
Celsus, Aulus Cornelius, 149, 200, 211, 215-216, 221, 288-298
Celtes, 491
Cervantes, 48
Cézanne, 110
Chadwick, Edwin, 12, 482
Chamberlain, O. B., 331
Chambers, 285
Chance, Burton, 339-340
Chaplin, Arnold, 556
Charaka, 230
Charcot, 5, 78
Charlton, Alex, 333
Charlton, Walter, 203
Chaucer, Geoffrey, 110, 227-228, 504-512
Chauliac, Guy de, 154, 161-162
Cherbonnier, Hector, 680-686
Cheyne, George, 517
Chifflet, J. J., 417, 419, 443, 446, 582-584
Chinchon, *Count* of, 568-587
Chinchon, *Countess* of, 448, 568-587
Chladni, Ernst Florens Friedrich, 206
Choulant, Ludwig, 216
Chrysermus, 219
Cicero, 96, 288, 293, 297
Cinyras, 529, 537
Ciocco, A., 667
Clark, *Sir* Andrew, 556
Clark, Anson L., 336
Clark, J. C., 463
Clark, Jefferson H., 60, 61, 104
Clark, W. P., 182, 184
Clarke, Edward H., 257
Cleland, Archibald, 205
Clendening, Logan, 105, 338, 358, 361, 362, 520, 521, 701, 702
Clendening, *Mrs.* Logan, 702
Clercx, 647
Cleyer, Andrew, 235, 243
Clusius, Carolus, 707, 708
Cobo, Bernabe, 425, 428-442, 450, 451, 569, 570, 585, 586, 588-592
Cohen, Abraham, 57, 58, 61, 62, 98-102
Cohen, Morris R., 368
Cohn, Alfred E., 332
Cohnheim, 78
Coiter, Volcher, 202
Coleman, George H., 342
Colladon, Jean-Pierre, 640
Collin, 262
Colon, François, 641, 643, 644, 646, 649
Colton, Gardner Q., 704, 705
Columbus, Christopher, 148
Columella, 291, 297, 298
Colunga, 425
Compton, Thomas, 273
Compton, Townsend, 273
Comte, Auguste, 9
Confucius, 548
Cook, *Captain*, 632
Cook, Donald, 625
Cooper, *Sir* Astley, 206, 326
Cooper, David A., 299-304, 362
Cooper, George F., 469
Copernicus, 631
Corbally, Thomas P., 486
Cordell, Eugene F., 516
Cordus, Valerius, 621
Corlett, William T., 630
Corner, George W., 703
Cornwell, Dean, 58, 59, 62, 100-104
Corti, Alfonso, 207

Corvisart, Jean Nicolas, 136, 138, 141-143, 147, 518, 553-555
Coston, Tullos O., 336
Cotugno, Domenico, 206
Councilman, William T., 259, 514
Cox, Daniel, 238
Cox, Ross, 191
Crato, 219
Crawford, John, 516
Creighton, Mandell, 565
Croll, Oswald, 693
Crommelin, C. A., 111
Crummer, Leroy, 309
Ctesias, 541, 542
Cullen, 268
Culpeper, Nicholas, 552
Cummins, Harold, 325, 326
Cumont, Franz, 378
Cunha, Felix, 349
Curry, W. C., 17
Curtiss, George M., 106
Cusanus, Nicolaus, 226
Cushing, Harvey, 76, 102, 306, 309, 326, 517, 630, 561, 564, 565, 705
Cushing, Henry K., 517
Cuvier, Georges, 143, 206, 709
Cyrillus, Dominicus, 240

Dale, 453
Dale, *Sir* Henry, 587
Dalmases, Vicente, 108-110
Daniels, Anna K., 333
Danielssen, 154
Danielsson, O. A., 35
Dante, 13
Dardanius, 37, 38
Dardanus (*see* Dardanius)
Daremberg, Ch., 216
Dariot, C, 23, 24
Darwin, Charles, 10, 667, 676, 677
Dattner, 269
Davenport, 463
David, Henry, 333
Davidson, Kallman, 258
Davidson, Virginia, 365
Dávila, Guillermo Fernández, 707
Davis, *Bishop*, 663
Davis, Michael M., 333
Dawson, Percy, 518
Deaver, 258
De Bow, 465
De Bry, 179
DeJak, J. J., 322
Delage, 51
Delcourt, Marie, 378
Delore, 262
Delvaux, 265
Demosthenes Philatheus, 218
Denman, Thomas, 565
Dercum, Francis X., 90
De Renzi, 31
Derosne, Charles Louis, 708, 709
Descartes, 108, 109
Deutsch, Albert, 332, 361
Dezoteux, François, 639, 647
Diaz de Isla, Ruiz, 163
Dickinson, W. H., 557
Dickson, Samuel Henry, 658
Diday, Paul E., 167
Digby, *Sir* Kenelme, 48-52
Diller, Theodore, 93
Diocles of Karystos, 378
Pseudo-Diocles, 35
Diogenes of Apollonia, 199
Dionysius, 204
Dioscorides, 507, 695
Pseudo-Dioscorides, 45, 46
Dittrick, Howard, 106, 334-335, 347, 356, 358, 361, 701
Dix, Dorothea Lynde, 101
Dock, George, 105, 343, 358, 363
Dodge, A. A., 625
Dodoens, 158
Dodson, John, 326
Dominques, 425
Donley, John E., 337
Donzellus, 453
Dover, Thomas, 515
Dowler, M. Morton, 463
Drabkin, Israel E., 368
Drake, Daniel, 327, 461, 462, 465
Drake, T. G. H., 272-287
Draper, John W., 16
Dresser, J. T., 322
Driesch, 51
Du Chaillu, Paul B., 530-533

DuChesne (*see* Quercetanus)
Duckworth, *Sir* Dyce, 558
Dugas, L. A., 465
Duhring, Louis A., 628, 630
Dunbar, H., 667
Dunbar, Robert G., 635-650
Duncan, James B., 467
Duno, Thaddeo, 112
Dupuytren, *Baron*, 106, 386
Durant, *Magister*, 524
Duverney, Joseph-Guichard, 205
Dvořák, 126

Eastman, Nicholson J., 330, 375, 388, 394
Edelstein, L., 364, 375, 378, 386, 388, 401, 402, 522, 523, 703
Edward VI, 16
Edwards, E. W., 326
Edwards, J. L., 326
Ehrenberg, C. G., 540
Elders, W. F., 322
Eli, 206
Eliot, Charles W., 254, 259
Elliot, 531
Elliot, T. R., 587
Elliott, J. H., 105, 120, 350, 356, 357, 359, 361, 362, 625, 702
Elmendorf, John E., 310
Elmer, Walter G., 61
Emerson, R. W., 546
Empedocles of Agrigentum, 199
Engels, Friedrich, 12, 13
Epicurus, 401
Erasistratus, 200, 211-215, 221, 290, 294
Erb, 70
Erhardt, Alois von, 484, 610
Ernst, 70
Erve, John van de, 331
Eshner, A. A., 79, 88-92
Espinosa, Fray Vasquez de, 427-431, 433, 438, 439, 441, 442, 450, 570, 589
Esporto, 425
Eustachius, 202
Evans, Herbert McLean, 111

Faber, Honoratus, 417, 419
Fabricius of Aquapendente, 158
Fabricius Hildanus, 515
Fair, Eleanor, 333
Falconer, William, 248-249
Falloppius, 164, 202
Fauchard, Pierre, 197
Faust, Bernhard Christoph, 374, 381
Felknor, George, 326
Fellenberg, Rud. von, 112
Fenner, E. D., 461, 515
Ferguson, E. B., 326
Fernelius, Jean François, 158, 164, 240
Feuillée, *Padre*, 108, 110
Fineberg, Edward, 326
Finlay, Carlos, 101
Finney, J. M. T., 514
Fischer, Hans, 112, 633
Fishbein, Morris, 342
Fisher, Charles Perry, 339
Fitz, Reginald Heber, 250-259, 341
Fleischer, Eleanor, 302
Flemyng, Malcolm, 238
Fletcher, Robert, 515
Flourens, Marie-Jean-Pierre, 207
Flower, William, 632
Floyer, *Sir* John, 236-237, 239, 243, 247
Fludd, Robert, 230-232, 243
Folio, Cecilio, 203
Fontenelle, 212
Foot, Jesse, 166
Forchheimer, 304
Forestus, 158
Formad, Henry, 78, 88
Forman, Jonathan, 105, 106, 334, 335
Forslund, H. C., 625
Fouquet, Henry, 239
Fourier, Jean-Baptiste-Joseph, 207
Fowler, James K., 544, 547, 559, 560
Fox, George Henry, 628, 630
Fracastoro, 164
Francis, W. W., 104, 305-308, 357, 361
Francisco, Don (*see* San Martín de la Vega, *Marqués* de)

Frank, Johann Peter, 14, 374, 378, 381
Franklin, Benjamin, 490, 517
Fraser, Christie M., 312
Frederick the Great, 516, 554
French, Tiberius G., 683
Freud, Sigmund, 208, 667, 676, 677
Friedenwald, Harry, 394, 516, 548, 707-708
Friesell, H. E., 704, 705
Frisimelica, 524
Frochot, Nicolas-Thérèse-Benoist, 641, 644
Frontenac, *Count* de, 191-192
Frost, H. R., 656
Frost, Richard K., 683
Fry, Clements C., 630
Fueter, Eduard, 112, 633
Fuller, Thomas, 545
Fulton, John F., 329, 630
Futch, W. D., 326

Gaddesden, Joannes, 161, 166
Gadsden, A. E., 658
Galdston, Iago, 261, 321, 333, 339, 361, 625, 703
Galen, 29, 40, 41, 157, 162, 198, 201, 210, 211, 215-224, 227, 229, 240, 243, 246, 288, 323, 337, 523, 544, 549, 561
Pseudo-Galen, 35, 37
Galileo, 48, 236, 370
Gallus, Anthony, 164
Gandia, Enrique de, 109
Gandini, Carlo, 240
Garcilaso, 111
Gardner, Frances T., 107
Gariopontus, 37, 40, 41
Garrick, 675
Garrison, F. H., 55, 123, 223, 394, 402, 545, 566
Garrod, O., 558
Gask, Norman, 274, 279
Gaskell, 285
Gay-Lussac, 709
Geber, 45
Gee, Samuel Jones, 548, 557, 558
Genecin, Abraham, 405
George I., 205
Gesner, 216
Gessner, Conrad, 112
Giacosa, 36
Gibbes, R. W., 660-662
Gilbert, William, 48
Gilchrist, P. P., 326
Gilchrist, Thomas C., 628
Gilles de Corbeil, Pierre, 224
Girauld, A., 156
Gladstone, W. E., 562
Glauber, 693
Gleitsmann, Joseph W., 330
Glover, Henry C., 656
Glover, J. R., 326
Godlee, *Sir* Rickman John, 563
Godwin, William, 10
Goethe, 130, 667, 673-675
Goldberger, Joseph, 345
Goldman, Olga, 327
Goldschmidt, Edgar, 112
Goldschmidt, Gunther, 524
Goldstein, Hyman I., 359
Gomoiu, Victor, 352
Gordon, Bernard de, 151-158, 161-163, 166, 167
Gorgas, William C., 705
Gorman, Miguel, 107
Gottlieb, Charles, 345
Graecinus, Julius, 292
Graham, A. Stephens, 341
Graves, 550
Gray, 144
Gray, Asa, 252
Greene, Robert, 689
Greenhill, W. A., 549
Greenhow, 502
Greenwood, Major, 560
Gregg, Allan, 261
Grenell, Robert Gordon, 48-52
Grier, S. L., 470
Griffith, J. P. Crozier, 91
Grinnell, George Bird, 184
Groff, Robert A., 703
Gross, Samuel W., 628
Grossman, Charles, 344-346
Grunpeck, 163, 164
Guerra, Gustavo S., 111

Guiteras, Juan, 70, 300
Gull, *Sir* William, 548, 556
Guttmacher, Allan, 375, 388
Guyot, Edme-Gilles, 205

Häfliger, J. A., 633
Haggis, A. W., 417-459, 568-592
Hales, Stephen, 243
Hall, George, 655
Hall, J. K., 341, 359
Hall, Thomas B., 520, 701
Haller, Albrecht von, 246, 247, 326, 524
Halstead, Frank G., 680-687
Halsted, W. S., 386, 392, 412
Haly Abbas, 222
Hamey, Baldwin, 552
Hamilton, James, 279
Hamman, Louis, 331
Hammond, E. L., 625
Hammond, Roland, 337
Hammurrabi, 109
Hanckel, John, 664
Hancock, J. Duffy, 329
Hanno, 529-535
Hans, *Master*, 623, 624
Hanslick, Eduard, 126
Hare, 304
Harington, *Sir* John, 551
Harlee, *Gen.*, 661
Harper, William Rainey, 146
Hart, Andrew D., 341
Harthcock, Martin B., 325
Hartmann, R., 534
Hartung, Edward F., 333, 344, 625
Harvey, Gideon, 419, 451, 452, 453
Harvey, William, 48, 49, 51, 98, 100, 212-213, 228-232, 236, 246, 312, 516, 518, 521, 552
Hashinger, E. H., 521
Haughton, *Rev.* Samuel, 550
Hauksbee, Francis, 205
Hausheer, Herman, 708-710
Hawkins, Eva, 355, 361
Haygarth, John, 555
Head, Jerome, 342
Heaton, Claude E., 333, 345
Heber, Reginald, 251
Heberden, William, Jr., 555
Heberden, William, Sr., 142, 248, 264, 517, 548, 554, 555
Hecht, Benjamin, 625
Heidel, William Arthur, 413
Heidel, *Mrs.* William Arthur, 413
Heinroth, 268
Heister, Lorenz, 106, 515
Hektoen, Ludwig, 304
Helbig, W., 536
Hellman, Alfred M., 333
Helmholtz, 207
Helmont, van, 203
Henkin, Leo J., 504-512
Henry I, *King* of England, 517
Henry, Frederick P., 80, 90
Henry, M. H., 628
Heracleides Erythraeus, 219
Heraclides of Tarentum, 200, 218
Heraclitus of Ephesus, 545
Hernandez, Francisco, 446-448
Herophilus, 209-211, 216, 221, 226, 228, 240, 290
Herman, V. G., 322
Herrick, James B., 105, 120, 136-147, 342, 706
Héry, Thierri de, 165
Herzogenberg, Elisabeth von, 127
Hess, Johann, 617, 621, 622, 624
Heyden, Herman van der, 584, 585, 587
Hickey, Mildred, 323
Hickman, Henry H., 705
Hines, Edgar A., 115, 362
Hippocrates, 28, 29, 33-36, 137, 199, 210, 214, 221, 223, 260-271, 288, 290, 294, 295, 346, 514, 523, 545, 549, 550, 552, 561, 695, 702
Hiroshige, H. R., 322
Hirsch, August, 163
Hoch, J. H., 331
Hock, 164
Hodgson, Joseph, 136, 138, 139
Hoffmann, Friedrich, 359
Hogarth, 675
Hogben, Lancelot, 416
Holcomb, R. C., 148-177, 356
Holland, Philemon, 551

Hollister, Albert Henry, 698
Hollister, Kittie E. V., 698
Holmes, A. F., 306
Holmes, Oliver Wendell, 101, 251, 326, 515, 557, 705
Homans, 656
Homans, John, 255
Homer, 522
Honigmann, 262
Hope, James, 142
Horace, 288, 516, 542, 543
Horder, T. J., 557, 558
Horine, Emmet Field, 209-249, 327, 329
Horlbeck, Elias, 656
Hostilius, 489
Hotchkiss, W. P., 702
How, Henry, 513
Howald, E., 42
Howard, *Gen.* O. O., 664
Howard, Robert Palmer, 76, 78, 306
Huber, E., 667
Hufeland, 264, 268
Hughes, John, 212
Hughes, William E., 58, 60-62, 65, 104
Hugo, *Magister*, 524
Hull, *Captain* Isaac, 53
Hull, John, 337
Hultsch, Friedrich, 38
Humboldt, Alexander von, 123, 130-131, 420, 570
Hume, Edgar E., 333, 355, 361, 476
Hume, Edward H., 333, 364, 390, 523, 625
Hunter, John, 165, 166, 198, 562, 563, 632
Hunter, Robert J., 57-62
Huntsberger, Raymond W., 321
Hurd, Edward Payson, 315
Hurd, H. M., 513
Hurst, 561
Husson, Henri-Marie, 647
Hutcheson, J. Morrison, 341
Hutchinson, Jonathan, 207, 306
Hutchison, *Sir* Robert, 560
Hutten, von, 163
Huxley, 78
Hyde, 628
Hypocrates (*see* Hippocrates)

Ibañez, Aníbal Lemos, 109
Imbelloni, Juan, 109
Imhof, Ludwig, 614
Imhotep, 312
Ingrassia, Gian Filippo, 201
Inlow, William D., 327
Ireland, E. J., 625, 626
Irish, Mary E., 343
Irons, Ernest E., 342, 395
Isidorus Hispalensis, 34
Isitt, *Mrs.* Frederick Harvey (*see* Camac, Eva)

Jackson, Elmer C., 349
Jackson, J. B. S., 254
Jackson, James, 251
Jackson, William H., 193
Jacobaeus, Oligerus (*see* Jacobsen, Holger)
Jacobi, Abraham, 706
Jacobsen, Holger, 204
Jacobson, Ludwig Levin, 206
Jaeger, W., 378
Jager, Thor, 520
Jaksch, von, 145
James, William, 546
Jamieson, Heber C., 356
Jamison, *Gen.*, 661
Jarcho, Saul, 333
Jaspers, K., 677
Jenkins, 665
Jenkins, Pierre, 331
Jenner, Edward, 331, 635-640, 642, 643, 645, 646, 650
Jenner, *Sir* William, 142, 556
Jesty, Benjamin, 517
Jörg, Miguel E., 109
Johannes de Sancto Paulo, 524
John of Milan, 550, 551
Johnson, *Pres.* Andrew, 664
Johnson, F. B., 331
Johnson, Loretta M., 61, 75
Johnson, Samuel, 16, 544, 546, 548
Johnson, *Rev.* W. A., 76
Jones, Benjamin R., 465

Jones, John, 513
Jones, W. H. S., 210
Jordan, Philip D., 106, 334
Joseph, Henry, 280
Judd, H. S., 322, 323
Jung, 673
Jung, C. G., 633
Jung, P., 633
Jurist, 258
Jussieu, Joseph de, 420, 570
Juvenal, 516

Kästner, H. F., 46
Kanada, 230, 233
Kanishka, *King*, 230
Kaufmann, Angelica, 513
Kaye, J. R., 566
Keats, John, 16, 515
Keefer, Frank R., 91
Keen, W. W., 259, 563
Kelley, W. H., 331
Kelly. Emerson Crosby, 333
Kelly, Howard A., 93, 314, 330, 392, 394, 295, 412, 513, 514
Keltz, Bert F., 336, 520, 701
Kemble, Fanny, 470
Kepler, Johannes, 236, 370
Keynes, Geoffrey, 544, 565
Kinsman, J. Murray, 329
Kircher, Athanasius, 204
Kirchhoff, Th., 667
Kirtland, Jared Potter, 334
Kiser, Edgar F., 318-320, 327, 358
Klaauw, C. J. van der, 111
Klages, 677
Klebs, Arnold C., 393, 630
Klein, 47
Knapp, 144
Knappe, Philippe, 680-686
Koch, Robert, 78, 98, 262, 476, 480
Konjias, Helen T., 379
Krantz, John C., 324
Krapf, Enrique E., 108, 109
Krause, Louis A. M., 704
Kremers, Edward, 626, 690, 692, 695-700, 706-707
Kretschmer, 667, 677
Kreysig, Ludwig, 136, 138, 140-142
Kronfeld, A., 677
Krumbhaar, E. B., 353, 358, 360, 361, 395
Kühlewein, H., 36
Kühnholtz, *27*, 40, 42
Kuo Sz, 413
Kyle, W. W., 326

Labrador, Sanchez, 108, 109
La Chapelle, *Madame*, 514
La Condamine, C. M. de, 420-424, 426, 440, 450, 456, 570, 579, 588
Laennec, 264, 326
Laghi, Sebastiano, 112
Lamb, John, 336
Lambert, A. B., 426
Lamberton, Robert E., 61
Lancereaux, 159-161
Lancisi, 137
Lanfranchi, 561
Langenbeck, *Baron* von, 515
Langland, William, 227
Lapham, Maxwell E., 325, 326
La Place, Louis B., 61
Larkey, S. V., 357, 362, 364, 365, 378-380, 386, 401, 402, 409, 522, 703
La Rochefoucauld-Liancourt, 641
Lassus, 143
Lastres, Juan B., 110, 111, 707
Latour, J. R. J., Amédée, 545
Laudonnière, René de, 179
Lavastine, Laignel, 262
Lavater, Johann Casper, 666-679
Laveran, 68, 80, 90
Law, Frank F., 58, 62
Lawrence, *Sir* William, 562
Leaman, William G., 105, 120
Lebensohn, James E., 342
Lebrun, 641
L'Ecluse, Charles (*see* Clusius, Carolus)
Lee, C. O., 626
Legg, Wickham, 557
Legge, James, 548
Leikind, Morris C., 355, 361, 411
Leikind, *Mrs.* Morris C., 411
Leiro, José María, 415
Lemery, 458, 459

Le Moyne de Morgues, Jacques, 179, 181
Leon, William, 326
Leonardo da Vinci, 370, 400, 409, 667
Leonicenus, 163
Leonicenus, Johannes, 524
Lesson, M. R.-P., 540
Leube, 70
Levine, V. E., 322
Levinson, Abraham, 342
Levy, Sanford, 106
Libman, Emanuel, 389, 390
Libri, 27, 40, 42
Lichtenberg, Georg Christoph, 666-679
Lichtenstein, 528
Liebig, Justus von, 474, 475, 602
Liek, 262
Lien-Teh, Wu, 236
Lind, James, 55
Lindsay, J. A., 547
Lindwurm, 601
Linhart, *Master*, 623
Linnaeus, 421, 448, 568, 696
Lister, *Lord* Joseph, 78, 98, 326, 517, 563, 632
Lister, Martin, 551
Lloyd, James Hendrie, 90
Lochner, Johann, 622
Locke, John, 313
Loewenberg, Richard D., 666-679
Long, Crawford W., 516, 705
Long, Esmond R., 120, 136, 347-363, 395
Loomis, 144
Lope de Vega, 107
López, Pedro, 109
Lounsbury, 17
L'Ouverture, Toussaint, 647
Lovejoy, Esther P., 314-317
Lowell, James Russell, 252
Lowes, 512
Luckhardt, Arno B., 107
Lucretius, 401
Ludwig, Carl, 78
Lugo, *Cardinal* de, 583
Lullo, Orestes Di, 109
Lusitanus, Amatus, 164, 202
Lutz, A., 633
Lymberis, M. N., 326
Lynch, Kenneth M., 57
Lypox, 33
Lyser, Michael, 203

Maar, E. E., 631
McBride, T. F., 704, 705
MacCallum, William G., 60, 74-83, 330, 394, 513-519
McCollum, Elmer V., 705
McCrae, T., 304, 517
McCready, Benjamin W., 374
McDaniel, W. B., 2nd, 340, 360
McDermott, W. C., 525-543
McDonald, A. L., 554
McDonald, Charles A., 337
McDowell, Ephraim, 101, 323, 705
Macer, 46
McEwen, 346
McFarland, Joseph, 60, 64-74
McGuigan, Clara Hammond, 93
Macht, D. I., 265, 270
Mackall, Leonard, 412
Mackenzie, 141
MacKinney, Loren C., 41, 366, 390
McLean, Stafford, 157
McMartin, W. J., 322, 323
McNutt, Ruth J., 327
Maggiore, Carl H., 322
Magnus, Rudolf, 208, 219
Mahon, Paul Augustin Olivier, 165, 166, 553
Mahony, Kenneth L., 521
Maimon Galipapa, 548
Major, Ralph H., 521, 702
Malloch, Archibald, 71, 333
Malloch, *Mrs.* A., 71
Malpighi, Marcello, 137, 204
Malthus, 10
Mancera, *Marquis* of, 580, 584-586
Manfredi, Paolo, 203
Manning, Don H., 322, 323
Manningham, *Sir* Richard, 565
Manrique, Alsono, 581
Manzoni, Bruno, 112
Maple, J. M., 327
Marbodus, 506

Marchettus, Petrus, 524
Marcus Graecus, 45
Marherr, Philipp Ambrose, 553
Markellinos, 221
Markham, *Sir* Clements R., 420, 570, 580, 582
Marquand, A., 537
Marquet, François Nicolas, 243-245
Marsh, M., 470
Martin, J. W., 322
Marx, 288, 290, 293, 295
Mary Tudor, 110
Mason, A. E. W., 564
Mason-Hohl, Elizabeth, 343
Massa, Nicolò, 201
Matas, Rudolf, 325
Mather, Cotton, 518, 519
Maugham, Somerset, 139
Mauriceau, 108, 514
Mayberry, *Col.* Thomas, 654
Maynard, P., 164
Mayo, 326
Mead, Kate Campbell Hurd, 115, 314-317, 362
Mead, Richard, 238
Mead, W. E., 314-316
Mece, 513
Meinecke, Bruno, 288-298
Meletius, 544
Mellor, *Sir* Frank, 312
Mellor, *Lady*, 312
Mendel, Lafayette B., 705
Mendelson, Walter, 115, 362
Ménière, Prosper, 207
Menninger, K., 672
Menuret, Jean-Jacques, 240
Mérat, F. V., 554
Méry, Jean, 204
Mesue, 524
Mesue III, 161
Metcalf, Julia Augusta, 310
Mettrie, J. O. de la, 554
Meyer, Hans Wilhelm, 208
Meyer, Minnie M., 626
Michael, *Master*, 621, 624
Michel, 648
Middleton, William S., 342, 358, 520, 701
Mieg, Joh. Rudolf, 524
Miller, Genevieve, 351, 352, 355, 361, 377, 379, 407, 409, 411
Miller, Hyman, 343
Mills, Charles K., 90
Mills, Robert, 656
Mills, Walter M., 521
Mills, William M., 702
Milton, John, 48
Minor, *Capt.* William G., 462
Minot, George R., 706
Minot, Jacques, 419
Mitchell, Clifford, 258
Mitchell, S. Weir, 78, 261, 331, 557, 628, 705
Mitchill, Samuel L., 687
Moale, Elise, 365
Mofras, Duflot de, 182
Moldonado, 425, 438
Molinari, José Luis, 108-110
Molinettus, Antonius, 524
Monardes, Nic., 427, 452, 707, 708
Monboddo. James Burnet, 534
Mondeville, Henri de, 161, 166
Monro, Alexander, *Primus*, 195-198
Monro, James, 195
Montagu, M. F. Ashley, 525-543
Montague, *Lady* Mary Wortley, 517, 636
Montanus, Fabricius, 112
Montcalm, 189
Moore, *Sir* Norman, 551, 552, 558
Moore, Norman Slawson, 398
Moorman, Lewis J., 336
Moragues, N. H., 463
Moreno, Aníbal Ruiz, 107
Morgagni, J. B., 137, 138, 246, 513
Morgan, A. C., 91
Morgan, John, 513, 514
Moritz, Alan R., 321
Morley, John, 549
Morrison, Hyman, 250-259
Morton, Richard, 419, 452, 453
Morton, William T. G., 516, 705
Moschion (*see* Mustio)
Moses, 209, 330, 489
Mothersill, Mark, 327, 328
Moyano, Braulio, 109

Moynihan, Patrick George Andrew Berkeley (*Lord*), 561, 564
Moxon, Walter, 558
Mozart, 16
Müller, Johannes, 515
Muir, Ernest, 150
Mulholland, Stanford, 704
Muñiz, Francisco Javier, 109
Munk, 552
Murphree, LeRoy, 325, 326
Murphy, Frank P., 323
Murphy, Jennings, 690
Musa, Antonius, 42, 44
Musser, John H., 78, 90, 145, 258
Mustio, 43, 47, 219
Mutis, José Celestino, 420
Myres, J. L., 537

Nadeau, Gabriel, 178-194
Napoleon Bonaparte, 16, 143, 518, 554, 641, 642, 650
Narkevitz, J. F., 322
Nashe, 689
Nasse, 268
Nelson, Axel, 35
Neumann, S., 14
Neustätter, Otto, 379
Newman, *Sir* George, 565
Newton, Isaac, 48, 132
Nicander, 200
Nicolas, *Master*, 621, 623, 624
Nicole, Pierre, 313
Nicoll, Henry D., 309
Nietzsche, 16, 127, 677
Nightingale, Florence, 308
Nihell, James, 237-238
Nittis, Savas, 333, 703
Nobili, Anthoni de, 614
Noguchi, Hideyo, 389, 390
Norwood, Fred, 343
Noussitou, Fernando M., 108, 109

Oartel, J. S., 705
Ochsner, Alton, 325
Octavianus Augustus, 44
Odier, Louis, 638, 640, 646
O'Hear, James, 331
Oliú, Ignacio, 109
Oliver, John Rathbone, 380, 413
Oliver, William, 453
Olmsted, 460
O'Neil, J. J., 322
Oppolzer, 253
Oribasius, 29
Orr, J. E., 626
Orta, Garcia de, 707, 708
Osler, Featherstone Lake, 76
Osler, *Mrs.* Featherstone Lake, 76
Osler, Revere, 74, 83, 96
Osler, *Sir* William, 57-104, 145-147, 250, 259, 261, 300, 304-307, 309, 312-314, 323, 326, 372, 392, 395, 513, 515, 517, 548, 550, 559, 628, 706
Osler, *Mrs.* William, 83, 94
Otto, Louis-Guillaume, 642
Overstreet, John W., 325, 326
Owen, Gilbert R., 343
Owen, Hubley R., 58, 61, 62
Owen, *Sir* Richard, 632
Owen, Robert, 12

Packard, Francis R., 354
Pagel, J., 141
Paget, *Sir* James, 562
Paget, Stephen, 563
Paige, *Mrs.* Mabeth Hurd, 315
Palcos, Alberto, 109
Palladius, 550
Pansier, P., 28, 42, 47
Pantaleon, Heinrich, 524
Pao Po Tzu, 236
Paracelsus, 105, 109, 116-118, 164, 226-227, 267, 270, 378, 382, 400, 401, 409-411, 632, 633, 688, 689
Pardal, Ramón, 108, 109, 110
Paré, Ambroise, 165, 198, 270
Pariser, H., 156
Parks, Lloyd M., 626, 690
Parran, *Surgeon General* Thomas, 472
Parry, 142
Pasteur, Louis, 78, 98, 474, 480
Paterson, D., 667
Paterson, Robert G., 105, 106, 334, 335, 356

Paul of Aegina, 41, 149, 222
Paul of Middleberg, 164
Pausanias, 541
Pavon, 420
Pawlow, Ivan, 667
Paynell, Thomas, 551
Payr, 145
Paz Soldán, Carlos Enrique, 111, 707
Peacock, C. E., 322
Pearson, George, 636, 637, 641, 642
Pedotti, Fausto, 112
Pelletier, 709
Pendleton, 468
Pentadius, 33
Peple, W. Loundes, 341
Pepper, William, 78
Perchner, Mathes, 619
Perkins, Harvey W., 326
Perrault, Claude, 204
Petit, Jean-Louis, 205
Petiver, James, 453-455
Petrus Hispanus, 524
Pettenkofer, Max von, 473-503, 593-613
Pfahler, George E., 61
Pfister, Albrecht, 619, 621, 624
Philaretus, 221-222, 226
Phillips, M. W., 468, 472
Phillips, U. B., 460
Physick, Philip Syng, 101
Picasso, 132
Pickard, M. W., 520, 701
Pickens, *Gov.*, 660-662
Pickton, Ellen Free (*see* Osler, *Mrs.* Featherstone Lake)
Pictet, Marc-Auguste, 638
Piffard, Henry G., 628
Pinel, Philippe, 268, 639, 640, 642
Piringer, L. F., 516
Pirkheimer, 490
Pitcairne, 517
Pizarro, Francisco, 707
Platearius, Joannes, 161
Plato, 96
Platt, Walter Brewster, 514
Plemp, Vopiscus Fortunatus, 218, 417
Pliny the Elder, 211, 214, 228, 291-293, 297, 298, 533, 541, 695
Plough, H. H., 321
Plukenet, Leonard, 455-457
Plutarch, 200, 214
Poetzl, 269
Pohl, H., 37
Politzer, Adam, 208
Pollitzer, Sigmund, 628
Pomet, P., 454, 455, 458
Pompilius Scotus, 524
Porcher, F. Peyre, 660-662
Porter, *Rev.* A. Toomer, 663
Pott, Percival, 106, 329
Pouchot, Pierre, 188
Power, *Sir* D'Arcy, 105, 358, 363
Pratis, Jason a, 513
Pratt, Joseph Hersey, 312
Praxagoras of Cos, 209, 210
Prentiss, Narcissa, 312
Price, Franklin H., 61
Priscianus, Theodorus, 33, 41
Prünsterer, Johann, 617, 622, 624
Prussak, Alexander, 208
Puhlmann, Walter, 31
Puller, H. R., 322, 323
Purchas, Samuel, 534
Pusey, William Allen, 628
Pycraft, B. M., 587
Pyl, Theodor, 206
Pythagoras, 199

Quercetanus, 693
Quincy, John, 551
Quintilian, 289, 291, 292, 297
Quiroga, Marcial I., 109, 110

Rahere, 517
Raimondi, 425
Ramazzini, Bernardino, 419
Ramirez, 419
Ramón y Cajal, S., 545, 566
Ramsay, William G., 658
Ra Nefer, 632
Ranney, 144
Rashīd al-dīn, 129
Rasis (*see* Rhazes)
Ravdin, I. S., 704
Ray, John, 453, 455-457
Raynaud, 137

Rea, Marion Hague, 58, 61, 94
Read, Bernard E., 352
Recchio, Nardo Antonio, 446
Redman, Kenneth E., 626
Reed, *Major* Walter, 101, 706
Reese, D. Meredith, 395
Rehfieldt, 631
Reichenbach, H. G. L., 541
Reil, 268
Reissner, Ernst, 207
Rembrandt, 48
Remsen, D. B., 331
Rennie, J., 540
Reser, William, 327
Reynolds, *Sir* Joshua, 632
Rhazes, 46, 222, 223, 230, 524
Ribera, Francisca Henriquez de, 572, 581, 586
Richardson, Maurice H., 259
Richtmann, 695, 696
Ricketts, Howard T., 705
Ricord, Alexandre, 378, 382
Riddler, John, 326
Riecken, Wm. E., 631
Riesman, David, 57, 58, 60, 61, 104, 115, 258, 299-304, 340, 362
Riesman, *Mrs.* David (*see* Fleischer, Eleanor)
Riesman, David, Jr., 302, 304
Riesman, John P., 302, 304
Riesman, Mary, 302, 304
Riesman, Nathan, 303
Riesman, Sophia Eisman, 303
Rima, Tommaso, 112
Rindfleisch, 70
Ring, 517
Riquebourg, Adrián, 109
Ritter, Dorothy, 319
Rivinus, Augustus Quirinus, 205
Robb, Hunter, 514
Robbins, I. L., 326
Robert, *Duke* of Normandy, 550
Roberts, Thomas S., 92-94
Robertson, Harold F., 61
Robertson, William Egbert, 60, 62
Robinson, 261
Robinson, Bryan, 243, 247
Robinson, Canby, 518
Robinson, Victor, 199-208, 332-333, 344
Robiquet, 709
Roemer, Milton I., 6, 333
Roesslin, 513
Rogers, Gerald, 336
Rogers, Leonard, 150
Roget, P. M., 547
Rogofsky, Ed. S., 626
Rojas, Nerio, 109
Rojas, Pedro, 109
Rokitansky, 253
Rolleston, *Sir* Humphry, 544-567
Rompel, J., 583-585
Roque, *Count* Joseph de la, 639
Rorschach, 673
Roscher, 490, 491
Rose, Valentin, 33
Rosen, E., 456
Rosen, Edward, 631
Rosen, George, 5-15, 116, 330, 332, 344, 411, 625, 703
Rosen, *Mrs.* George, 411
Rosenbach, Ottomar, 10
Rosenberger, Randall C., 84-88
Rosenstein, Nils Rosen von, 165
Rostenberg, Leona, 614-624
Rothmann, C., 445, 446
Rothrock, J. L., 94-95
Rottenburg, Heinrich von, 524
Rousseau, 672
Rowbotham, Arnold H., 11
Rowe, T. W., 626
Rucco, Julius, 240
Rucker, M. Pierce, 341
Rueff, 513
Rufus of Ephesus, 29, 200, 216
Ruggles, Arthur, 359
Ruiz, Don Hipólito, 420, 424-426, 589
Rush, Benjamin, 514, 705
Russo, Anthony J., 115, 318-320, 362
Russo, Mary, 319
Russo, Robert, 319
Rutledge, Winston, 329
Ruysch, Frederick, 110
Ryle, J. A., 560

St. Hilaire, Etienne Geoffroy, 51
St. Martin, Alexis, 98, 100, 327
St. Sebastian, 128
Salzman, C., 112
Sanctorius, 236, 551, 552
Sanderson, J. Burdon, 76
Sandoval, Gomez de, 581
San Martin de la Vega, *Marqués* de, 577
Santisteban, 420
Sappington, John, 520, 701
Sarrail, J. A., 322
Sarton, George, 1, 105, 120, 123-135
Sauerbruch, 262
Savage, T. S., 529, 534
Savonarola, 226, 240
Savory, *Sir* William, 562
Saxonia, Hercules, 227, 240, 243
Scaliger, J. C., 542
Scarpa, Antonio, 109
Schadewald, Otto, 222
Schafer, Joseph, 699
Schaudinn, 156
Schelhammer, Günther Christoph, 205
Schiaffino, Rafael, 105, 358, 363
Schick, B., 265
Schilder, 269, 667
Schiller, 673, 675
Schlick, Arnold, 201
Schlosser, J. U., 325, 326
Schlueter, Robert E., 105, 116, 118
Schneider, Konrad Viktor, 203
Schoene, Hermann, 221
Schramm, Elizabeth E., 355, 361
Schultz, Adolph H., 354
Schuman, Edward E., 58
Schumann, 126
Schwartze, Hermann, 208
Scott, W. J. Merle, 706
Scribonius Largus, 200
Séguin, Armand, 708, 709
Seidel, 500
Seleucus I, *King* of Syria, 211, 214
Semmelweis, 557
Senac, Jean, 137, 142, 247
Senn, Gustav, 112
Sennert, Daniel, 158
Serapion, 230
Sertuerner, Friedrich Wilhelm, 708, 709
Sewell, Samuel, 337
Sextus Placitus, 46
Seymour, Alfred M., 91
Shakespeare, E. O., 78, 88
Shakespeare, William, 16-26, 48, 132, 167, 228
Shaw, Peter, 560
Sheldon, 667, 677
Sherwell, Samuel, 630
Shimer, William S., 93
Shira, Donald D., 106, 334, 349
Shore, John, 205
Shrapnell, Henry Jones, 207
Shryock, Richard H., 333, 339, 353, 355, 356, 361, 366, 460, 703
Siculus, Titus Aufidius, 288, 290
Siegemundin, Justine, 514
Sierra, José M., 110
Sigerist, Henry E., 1-4, 14, 27-47, 39, 42, 111, 115-122, 128, 261-269, 330, 332, 339, 344, 347-363, 364-416, 473-503, 523, 559, 593-613, 688-689, 702, 703, 707
Silverman, Max, 705
Simkins, C. S., 323
Simon, John, 482, 493, 599.
Simon Januensis, 45, 46
Simonds, James P., 342
Simpson, James Y., 705
Singer, Charles, 390
Singer, Dorothea, 390
Sinkler, 78
Skeat, W. W., 504, 506, 544
Skinner, E. H., 520, 701
Skoda, 253
Sloane, Hans, 455-457
Smillie, Wilson G., 333
Smith, Evelyn, 701
Smith, Frank, 514
Smith, George M., 630
Smith, Hugh, 279
Smith, Nathan, 513
Smith, Pearsall, 544, 548, 549, 555
Smith, Theobald, 705
Smith, Uly, 329
Smith, W. A., 331

Snow, John, 482, 705
Sobremonte, Casper Bravo de, 419
Socrates, 96
Soemmerring, von, 554
Solano de Luque, Francisco, 237-239
Solinus, C. J., 542
Solis-Cohen, S., 628
Soranus, 28, 375, 388, 549
Southard, E. E., 671
Spachius, 513
Spallanzani, 370
Sparer, Phineas J., 330
Spector, Benjamin, 321, 395
Spellman, C. W., 322
Spinoza, 48
Spruce, 420
Spurling, R. Glen, 329
Stadler, H., 35
Stahl, Franklin, 79
Stange, V. A., 236
Stanton, William, 325
Steber, 163, 164
Steineffer, Juan, 110
Steiner, W. R., 354, 356, 361, 517
Stelwagon, Henry W., 628
Stensen, Niels, 203
Stephanus, 544, 550
Stevens, 653
Stevenson, George S., 333
Stille, Alfred, 78, 546
Stimson, Dorothy, 380, 415
Stokes, 166
Stoll, Maximilian, 548, 553
Stone, Warren, 326
Stoner, M. E., 322
Stratonice, 212, 214
Streeter, Canon, 135
Streeter, Edward C., 630, 631
Strieby, Irene M., 327-328
Strohl, J., 112
Strümpell, Adolf, 144, 145, 147
Struthius, Josephus, 215, 240-243
Stuck, Walter, 349
Stuehler, B. R., 322
Sturges, Octavius, 557
Sturm, Johann, 616
Sturm, Roland, 417, 419, 443, 445, 446, 582
Suardo, Don Antonio, 572, 579
Sudhoff, Karl, 36, 47, 164
Suranus (*See* Soranus)
Susruta, 230
Sutton, Edward L., 115, 362
Swados, Felice, 460-472
Swift, 673
Sydenham, Thomas, 301, 304, 552-554
Sylvius, 267
Symon, Herbrant, 524

Tafur, Bartholome, 584-586
Taggart, George, 60, 63
Tagliocozzi, Gaspare, 202
Talbor, *Sir* Robert, 419, 451, 583
Talbot, Nell Snow, 411
Talley, A. N., 662
Talleyrand, 641-643, 650
Tarbes, R., 648
Tarquin the Elder, 488
Tascheret, Oscar, 109
Taylor, Edward Wyllys, 337
Temkin, C. Lilian, 116
Temkin, O., 330, 364, 375, 378, 381, 386, 388, 401, 402, 522, 523, 703
Testa, 136, 138, 141, 142
Thacher, James, 190
Thayer, William Sydney, 259, 518
Theodoric, 161, 166
Theophilus, 544, 550
Theophilus Protospatharius (*see* Philaretus)
Theophrastus, 368
Thessalus, 45
Thomas, 514
Thomas, George J., 705
Thompson, G. Raynor, 368
Thompson, Malcolm, 329
Thomson, Samuel, 681, 685-687
Thorndike, Lynn, 41
Thouret, Michel-Augustin, 642, 646, 648
Tiberius, 289
Tift, Henry, 326
Tissenet, du, 192
Torres, P. Diego de, 575
Torrey, Robert G., 61, 75
Townsend, David, 53-56

Townsend, John, 331
Tracy, Martha, 61
Trajan, 217
Trask, John W., 53
Trautman, Walter J., Jr., 325, 326
Trebing, Hope M., 348, 411
Trenholm, George A., 663, 664
Trent, Robert L., 336
Trittler, Jorg, 619, 624
Trolan, W. H., 322
Trommsdorff, 708, 709
Trotter, Wilfred, 564
Trousseau, 342, 559
Trudeau, Edward L., 705
Trufant, Samuel, 326
Tucher, Anton, 622, 623
Tucker, David A., Jr., 701
Turnbull, William G., 58, 61, 62
Turner, Roy H., 326
Tut-an-khamen, *King*, 209
Twitchell, Amos, 327
Tyler, Louis Ira, 326
Tyson, 78
Tyson, Edward, 541

Uhl, Arthur H., 626, 690, 707
Ullman, Montague, 333
Ulloa, 420
Urdang, George, 361, 626, 690-700, 707-710
Uribe, *Major* J. S., 587

Valentin, Louis, 639, 647, 648
Valentini, Michael Bernhardus, 242-243
Valescus de Taranta, 161, 166
Valle y Aldabalde, R. del, 223
Vallée, Arthur, 352
Valsalva, Antonio Maria, 137, 205
Van Harlingen, Arthur, 628
Van Swieten, Gerhard, 553
Vasconcellos, A. L., 322, 323
Vassée, 109
Vega, Juan de, 576, 580, 582, 585, 586
Vegas, Marcelino Herrera, 109
Vella, George, 164
Velpeau, Alfred, 106, 342, 515
Vesalius, 201, 631, 702
Vezou, Franciscus, 453
Vickery, 144
Vierordt, 243
Viets, Henry R., 53-56, 226, 361, 395
Vieussens, 137, 142
Vigo, John de, 163
Villarobel, 451, 581, 583, 585
Vindicianus, 33
Virchow, Rudolf, 15, 76, 78, 98, 137, 251, 253, 500
Virgil, 288
Vitruvius, 488
Voit, Carl, 602, 610

Wagenheim, Harry Hart, 326
Wagner, Richard, 126, 127
Wagner-Jauregg, 269
Waites, F. C., 331
Walcott, Henry P., 259
Walker, Claude F., 335
Walker, G. I., 326
Walker, George E., 701
Walker, Mabel, 328
Waring, Joseph Ioor, 331, 651-665
Warmington, E. H., 531
Warren, H., 667
Warren, John, 251
Warren, John Collins, 251
Waterhouse, Benjamin, 53, 56, 251, 517, 687
Wathen, Jonathan, 206
Watson, *Admiral*, 55
Weaver, Ruth Hartley, 61, 75
Webster, Daniel, 251
Weddell, 420
Weigert, 78
Weinberger, B. W., 355, 361
Weinstein, B. Bernard, 325-326, 631
Weiss, Soma, 261, 321
Welch, William H., 261, 309, 314, 372, 379, 392, 393, 395, 513, 514, 522
Wellcome, *Sir* Henry, 572
Wellman, Max, 217, 288, 289, 293, 295
Wells, Horace, 704, 705
Werner, H., 671
Werthaimer, Quentin, 619

Wesley, John, 513
West, James M., 705
Wetsch, Ignatius Josephus, 240
Whipple, George H., 706
White, James C., 628, 630
White, William, 343
Whitecloud, Tom, 326
Whitman, Marcus, 312
Whitney, W. F., 256
Wibmer, 495
Wiener, Julian, 325
Wiesenthal, Andrew, 516
Wiesenthal, Charles F., 516
Wilde, William Robert Wills, 207
Wilhelmj, C. M., 322-323
William of Salicet, 151, 161
William the Conqueror, 550
Williams, H. U., 160, 161
Williams, John R., 706
Williams, Philip F., 61
Willis, 419
Willis, Thomas, 204
Wilson, 72, 78
Wilson, Charles Monroe, 325, 326
Wilson, E. B., 51
Wilson, J. W., 321
Winther of Andernach, 29, 30
Winthrop, John, 518
With, 256
Wittels, Fritz, 703
Wölfflin, E., 633
Wolf, Heinrich, 616, 617, 619, 621, 622, 624
Wolff, Caspar Friedrich, 51
Wolff, Maggie, 83
Wolf-Heidegger, G., 633
Woll, E., 322
Wollaston, 342
Wong, K. Chimin, 236, 413, 633
Wood, 49
Wood, Chas., 329
Woodard, Parke H., 521, 701
Woods, Alan C., 703
Woodville, William, 636, 637, 639, 640, 643, 647, 649
Worcester, Alfred, 257
Worcester, Noah, 628, 630
Workman, 328
Wreden, Robert Robertovich, 208
Wright, I. A., 572
Wright, Ramsay, 80
Wyman, J., 252, 529, 534

Yahuda, Abraham S., 330
Yates, 664
Yerkes, A. W., 534
Yerkes, R. M., 534
Young, A. C., 705
Young, Hugh H., 516
Ypocras (*see* Hippocrates)

Zacchias, Pablo, 107
Zappelli, A. J., 322
Zendrini, B., 419
Zenetti, Arnold von, 484, 602
Zenon, 218
Zilboorg, Gregory, 116, 269, 333, 359, 361, 363, 390
Zimmer, Heinrich, 390, 391
Zimmerman, Bartholomew, 616, 619, 621, 623
Zimmermann, Johann Georg, 667, 668
Zinsser, H., 326, 705
Ziskind, M. M., 326

JAN 28 1942

BULLETIN OF THE HISTORY OF MEDICINE

Organ of the American Association of the History of Medicine and The Johns Hopkins Institute of the History of Medicine

Editor—Henry E. Sigerist

Volume X DECEMBER, 1941 Number 5

CONTENTS

The Introduction of the Practice of Vaccination into Napoleonic France: Robert G. Dunbar 635

The Marine Hospitals of Charleston: Joseph Ioor Waring .. 651

The Significance of the Obvious: an Eighteenth Century Controversy on Psychosomatic Principles: Richard D. Loewenberg 666

Texts and Documents

A First-hand Account of a Treatment by Thomsonian Medicine in the 1830's: Text and Notes: Frank G. Halstead 680

Notes and Comments

The Word "Bombastic": Henry E. Sigerist 688

Medico-Historical News and Activities

The American Institute of the History of Pharmacy: George Urdang 690

Announcements 701

Index of Names 711

THE JOHNS HOPKINS PRESS

BALTIMORE, MARYLAND

BULLETIN OF THE HISTORY OF MEDICINE

ORGAN OF THE AMERICAN ASSOCIATION OF THE HISTORY OF MEDICINE AND THE JOHNS HOPKINS INSTITUTE OF THE HISTORY OF MEDICINE

Editor—HENRY E. SIGERIST

Correspondence relating to the publication of papers should be addressed to The Editor, Bulletin of the History of Medicine, 1900 East Monument Street, Baltimore, Maryland, U. S. A.

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THE JOHNS HOPKINS PRESS

BALTIMORE, MARYLAND, U. S. A.

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Made in United States of America

Entered as second-class matter January 3, 1935, at the post office at Baltimore, Maryland, under the Act of March 3, 1879.

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